



# Solid Waste Management Program Assessment and Facility Consolidation Study

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## EXECUTIVE SUMMARY

### Objective

This Study was prepared to develop an asset inventory as well as recommendations for changes for the system of 14 transfer stations used for residential solid waste, recyclables, and yard waste collection in Ontario County. Findings were based on document review, site visits, staff interviews, data analysis, and other information synthesis activities performed by SCS on behalf of the County.

### Facility Inventory Findings

SCS inventoried and evaluated the infrastructure and programs at all 14 transfer station facilities in the County and also conducted site visits at the County Landfill, Ontario County MRF, and Monroe County ecopark for additional context in the development of Study findings. Results are presented in Section 2.0 of this report and summarized in Table 4. Facility evaluations were also conducted in the context of facility-specific strengths and weakness considerations, which included the following:

- Good Location and Site Configuration
- Good Compaction
- Good Yard Waste Management
- System User Fees and Net Costs
- Good Utilization/ Operating Hours
- Good Waste Reduction and Diversion
- Unit Costs
- Low Program Risk
- Service Lines
- Municipal Tax Base

Eight transfer stations were selected for inclusion in Section 3.2 of this report due generally based on possession of the positive qualities listed above. Further site evaluation information by facility is presented in Appendix C. Appendix E includes findings regarding the other six facilities not included in Section 3.2.

### Facility Consolidation Evaluation Findings

As discussed in Section 3.0 of this report, SCS recommends that the County work with municipalities to consider consolidating services provided by the transfer stations. SCS proposes a “hub and spoke” system with facility consolidation, reducing from 14 to 7 locations. Proposed facilities would provide unique regional needs, with the central “hub” developed for special waste collections which might include household hazardous waste (HHW) and other materials similar to the Monroe County ecopark in Rochester. The new central facility could also be constructed in phases with infrastructure necessary for future desired service lines to be implemented at a later date.

The proposed system of waste collection facilities is based on existing facility strengths as well as future potential efficiencies and effectiveness of service delivery to residents. The proposed system changes, organized by region within the County, is summarized in the following table:

Proposed Region	Type/No. Proposed Converted Facilities	Facilities for Conversion		No. Sites Closed	Programs to Consolidate into Hub/Spoke Facility
		Solid Waste/ Recycling	Yard Waste Processing		
Southwest	Spoke (1)	South Bristol	South Bristol	(2)	<b>Naples and Richmond</b>
Northwest	Spoke (2)	Victor	Farmington	(1)	<b>West Bloomfield;</b> Victor (yard waste only); and Farmington (solid waste only)
Central	Hub (1)	Town of	Town of	(1)	<b>Bristol</b>

Proposed Region	Type/No. Proposed Converted Facilities	Facilities for Conversion		No. Sites Closed	Programs to Consolidate into Hub/Spoke Facility
		Solid Waste/ Recycling	Yard Waste Processing		
		Canandaigua	Canandaigua		
Northeast	Spoke (2)	Manchester	Phelps	(1)	<b>Hopewell</b> ; Manchester (yard waste only); and Phelps (solid waste only)
Southeast	Spoke (1)	Landfill, Seneca or Gorham	Landfill, Seneca or Gorham	(1-3)	<b>Geneva</b> ; Seneca and/or Gorham

Note: Proposed central regional hub at City of Canandaigua would have potential to include HHW collection drop-off services in addition to drop-off of special wastes requiring economies of scale for efficient collections.

Section 3.4 of this report provides analysis of impacts from consolidation. These include cost estimates for upfront site improvements, operations changes, and impacts to current constituents.

## Collection Event Evaluation Findings

County and municipal HHW and special waste collection events currently provide an opportunity for residents to discard certain materials. Such events include two categories of materials: 1) materials not normally accepted at facilities, but accepted at other municipal programs within the County; and, 2) materials only accepted at special County collection events, such as HHW. Currently, these programs provide a valuable service to residents. The need for these special collection events could be reduced or eliminated under the proposed hub-and-spoke consolidated system through development of permanent special waste/HHW materials collections infrastructure at the new or modified drop-off facilities. The Collection Events review and potential consolidation evaluation are presented in Sections 4.0 and 5.0 of this report, respectively.

## Overall Recommendations

Overall recommendations are presented in Section 7.0 of this report. They include the following:

### Municipal Facility Consolidation

As discussed in Section 3.0 of this report, we recommend that the County work with municipalities to consider consolidating solid and yard waste operations. There will be significant capital costs associated with upgrading these facilities to handle increased traffic and/or provide consistent services. However, these facility consolidations would improve waste collection service quality while minimizing impacts to costs and constituent convenience.

### Centralized Special Waste Collection Facilities

As discussed in Section 5.0 of the report, a centralized facility could be developed for special waste and HHW streams which could supplement or replace HHW Collection Events. Development of the central facility would likely come at significant cost, but this facility will provide a consistent source for disposal of HHW, thus minimizing the amount of HHW improperly disposed in the MSW or recyclable streams, or illegally dumped.

### New York State Grants

We recommend that the County pursue a NYSDEC Municipal Waste Reduction and Recycling Program Grant for the solid waste facility consolidations and the HHW facility development, as well as hiring a Recycling Coordinator for the County. If the County decided to pursue food waste composting at the yard waste facilities, it could also apply for Food Waste Reduction and Diversion

Reimbursement grants and/or Community Grants from NYS2PI. Information regarding the details and availability of New York State Grants is presented in Section 6.0 of this report.

## 1.0 INTRODUCTION

The Ontario County (County) Department of Sustainability and Solid Waste Management retained SCS Engineers of New York, PC (SCS) to perform this Solid Waste Management Assessment and Facility Consolidation Study (Study). This Study evaluates possible consolidation of municipally-owned solid waste facilities, along with improvements/expansion to certain facilities. This Study also evaluates County collection events and considers establishment of a permanent, central County collection facility.

The municipally-owned solid waste facilities typically include one or more of the following operations at a single location, as defined in NYSDEC solid waste regulations:

- Transfer facility
- Mulch processing facility
- Composting processing facility
- Waste tire handling facility

These operations/facilities are defined in the New York State regulations at 6 NYCRR Part 360 and are subject to the specific, relevant requirements of Part 361 or Part 362.

## 1.1 STUDY OBJECTIVES

The purpose of the Study is to:

- Inventory and analyze all municipally-owned solid waste facilities and provide recommendations for facility consolidation or improvements/expansion, while identifying availability of potential grant funding for such changes.
- Review and analyze solid waste collection event data and provide recommendations for consolidation or expansion of future events (including consideration of establishment of a permanent central County collection facility) to increase participation and cost efficiency.

## 1.2 COUNTY SOLID WASTE MANAGEMENT SYSTEM

### Existing Solid Waste Management Facilities and Programs

Based on 2010 census data, the County's population is approximately 108,000, spread out over a land area of 644 square miles (mi<sup>2</sup>), with a resulting average population density of 168 people per mi<sup>2</sup>. The County includes 26 municipalities, each of which provide varying levels of service for solid waste management. See **Exhibit 1 below** for locations of solid waste management facilities, and **Table 1 below** for a summary of services provided by each municipality.

Transfer Stations

- 1 Town of Bristol TS
- 2 Town of Canandaigua TS
- 3 Town of Farmington TS
- 4 Town of Geneva TS
- 5 Town of Gorham TS
- 6 Town of Hopewell TS
- 7 Town of Manchester TS
- 8 Town of Naples TS
- 9 Town of Richmond TS
- 10 Town of Seneca TS
- 11 Town of S. Bristol TS
- 12 Town of Victor TS
- 13 Town of W Bloomfield TS
- 14 Village of Phelps TS

Landfill

- Ontario Co. LF

Recycling Center

- Ontario Co. MRF

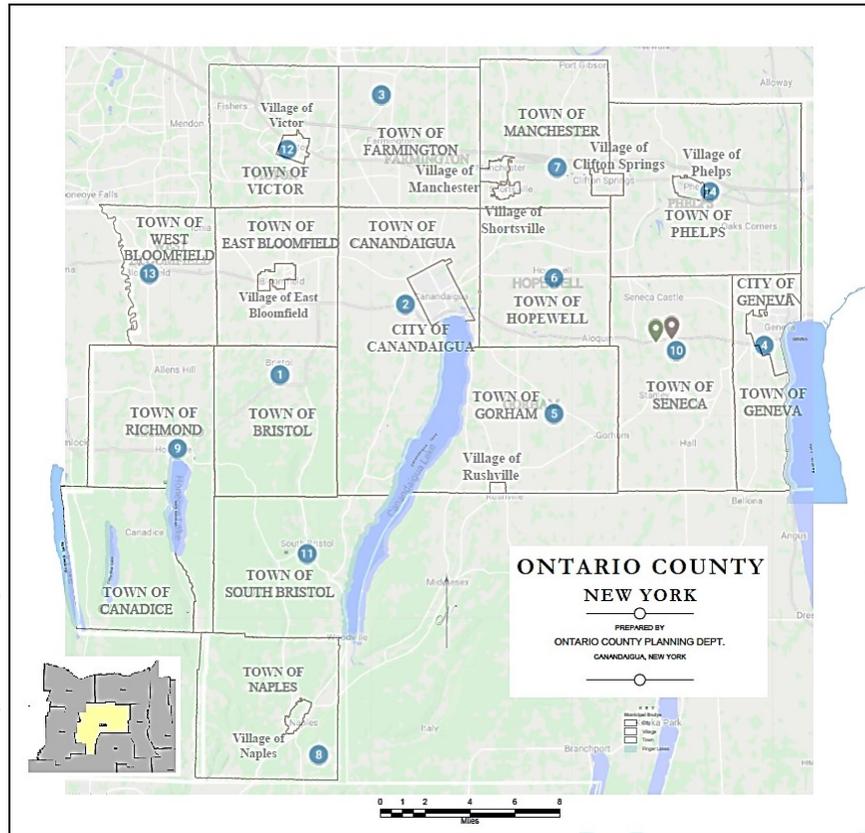


Exhibit 1. Municipalities and Facilities

The Local Solid Waste Management Plan (LSWMP) states that, in 2011, approximately 130,000 tons of waste were generated in the County, of which about 115,000 tons were landfilled and 15,000 tons were diverted (generally via mulching/grinding, composting, and recycling). The County diversion rate at that time was about 12% and its disposal rate was about 1.1 tons per person per year, which was higher than the statewide average of 0.75 tons per person per year estimated in the 2010 New York State Solid Waste Management Plan.

According to County records, in 2018, approximately 97,500 tons of waste were generated in the County, of which about 71,500 tons were landfilled and 26,000 tons were diverted. Thus, waste diversion activities within the County have increased relative to 2011. The 2018 diversion rate was about 27% and the disposal rate was about 0.9 tons per person per year.

Solid waste management in the County is de-centralized. Municipalities make their own solid waste-related decisions concerning types and levels of services offered. This has resulted in a wide variety of solid waste management practices and programs throughout the County. Most residents use one of the 14 municipally-owned solid waste facilities shown in Exhibit 1. The City of Canandaigua and the Village of Victor are the only municipalities in the County that provide curbside waste collection services for their residents. These municipalities transport the collected waste directly to the County Landfill for disposal. A summary of municipal solid waste programs/services, by material and for all County municipalities, is provided in **Table 1 below**.

Table 1. Solid Waste Services by Municipality

Municipality	MSW	Recycling	Bulk Waste	Yard Waste	C & D	Electronics	Tires	Scrap Metal	Shared Programs
City of Geneva				X					
City of Canandaigua		X	X	X	X	X			Residents may use facility in Town of Canandaigua
Town of Farmington			X*	X	X	X*			* Once a year
Town of Bristol	X	X	X	X	X	X		X	
Town of South Bristol	X	X	X	X	X	X		X	
Town of Richmond	X	X	X	X	X			X	
Town of Phelps	X	X	X	X	X			X	Residents may use facility in Village of Phelps
Town of Manchester	X	X	X	X		X	X	X	
Town of Hopewell	X	X	X	X		X	X	X	
Town of Gorham	X	X	X	X	X	X		X	
Town of Seneca	X	X	X	X	X			X	
Town of Victor	X	X	X	X	X		X	X	
Town of Canandaigua	X	X	X	X	X	X		X	
Town of Naples	X	X	X	X	X				Shared drop off services with Village of Naples
Town of Geneva	X	X		X				X	
Town of West Bloomfield			X	X	X			X	
Town of East Bloomfield	X	X	X	X				X	Residents may use facility in Town of Bristol
Town of Canadice	X	X	X	X	X			X	Shared drop off services with Town of Richmond
Village of Victor	X	X	X	X	X			X	Residents may use facility in Town of Victor
Village of Manchester	X	X	X	X		X	X	X	Residents may use facility in Town of Manchester
Village of Phelps	X	X	X	X	X			X	
Village of Shortsville	X	X	X	X		X	X	X	Residents may use facility in Town of Manchester
Village of Bloomfield				X*					* Twice a year
Village of Naples	X	X	X	X	X				
Village of Rushville	X	X	X	X	X	X		X	Residents may use facility in Town of Gorham
Village of Clifton Springs	X	X	X	X		X	X	X	Residents may use facility in Town of Manchester

Note: While table was taken from Request for Proposals (RFP) for this Study, it has been updated based on Study field findings in **Table 3 below**.

Some of the facilities host other New York State Department of Environmental Conservation (NYSDEC)-regulated facilities, as illustrated in **Exhibit 2 below**. An enhanced map of the facilities is included in **Appendix A**, which identifies other operations such as mulch processing, composting, and waste tire handling.

An overview of the 14 facilities is provided in Table 2. A summary of facility policies and practices by material is included in **Appendix B**.

Further, in some instances, in addition to a solid waste facility, some municipalities operate other defined facilities, usually for handling organic materials (e.g. source-separated yard and food waste, and wastewater biosolids). These additional facilities include town and village “brush pits” that supplement yard waste areas at the facilities, as well as municipal sites for processing and transfer of collected brush, leaves, grass clippings, and other materials.

The municipal facilities accept municipal solid waste (MSW) and recyclable material using a variety of user fee formats, including the following:

- Coupon system or priced-by-item
- By volume (i.e., per bag or per cubic foot of material)
- By weight (i.e., per pound)
- Unlimited with annual permit
- A hybrid of these approaches, with select services (particularly recycling) offered for free

The majority of MSW collected at the municipal facilities is disposed at the County Landfill, which is the only operational landfill within the County. The County Landfill is located in the Town of Seneca, and is operated by New England Waste Services of NY, a subsidiary of Casella Waste Systems (Casella), a privately-owned waste company. The County entered into a 25-year Operation, Management, and Lease (OML) Agreement with Casella in 2003, and Casella has since been responsible for all operations and associated compliance for the Landfill and other facilities on the 389-acre Landfill property. Other facilities on the Landfill property operated by Casella include a 68,000-sf “Zero Sort” Materials Recovery Facility (County MRF), sometimes referred to as “Ontario Recycling” or “Ontario County MRF”; a storage facility formerly operated as a MRF by the County prior to the 2003 Agreement; and, the Town of Seneca’s municipal facility. The OML Agreement expires in 2028.

Some waste is disposed at other area landfills (e.g., Albany Rapp Road, Allied Waste Niagara Falls, High Acres, Seneca Meadows).

## Exhibit 2. Summary of NYSDEC-Defined Facilities



• **Transfer Facilities/Convenience Centers:** All of the 14 transfer facilities accept MSW, in either the form of permanent fixed facility or event-based acceptance. 12 of the 14 convenience centers are registered with NYSDEC as MSW transfer facilities, though none are permitted (it is unclear if any need to be permitted). **Farmington and Manchester** are not registered with the NYSDEC as transfer facilities.



• **Yard Waste Drop-off:** All 14 transfer facilities accept yard waste, although they vary somewhat in terms of the exact types of materials accepted and the methods of acceptance, storage, and transfer and/or processing. The Towns of **Geneva, Manchester, Naples, South Bristol, and Victor** have independent municipal "brush pits" in addition to facility yard waste drop-off areas.



• **Mulch Processing Facilities:** All transfer facilities manage yard waste by transfer/handling at a separate facility or processing on-site. The latter is accomplished through mulch processing and/or composting. 10 of the 14 transfer facilities process their collected material during (at least annual) mulch processing events. **The four facilities that do not are Geneva, Hopewell, Manchester, and Seneca.** South Bristol transfers yard waste within the facility property, from the recycling building to the brush pit/highway area up the hill.



• **Composting Processing Facilities:** Four programs include composting of materials, such as grass, leaves, and lakeweed. This was confirmed for the following facilities: **Canandaigua, Farmington, Richmond, and Victor.**



• **Waste Tire Facilities:** Only four facilities regularly accept waste tires: **Hopewell, Manchester, Naples and Victor.** Farmington also accepts tires, but only at semi-annual collection events. Tires were observed to be stored at Gorham, presumably having been removed (as unacceptable material) from MSW or generated by municipal vehicles.



• **Other Materials Acceptance:** Facilities at **Canandaigua and Victor** accept waste motor oil. When site petroleum aboveground storage tank (AST) capacity exceeds 1,320 gallons, federal Spill Prevention, Control, and Countermeasure (SPCC) plan requirement is triggered. Although Canandaigua and Victor both accept used motor oil from residents via 250-gallon collection tanks, only **Canandaigua** appears to trigger the SPCC plan requirement due to the presence of a 2,000 gallon storage tank. Canandaigua staff indicated that the highway department complex is covered by a facility-wide SPCC plan.

Table 2. Municipal Facility Overview

Site No. <sup>1</sup>	Type <sup>2</sup>	Facility Name (Owner)	Shared Programs <sup>3</sup>	Operator [Private Contractor]
1	SWF/YW	Town of Bristol	Town of E Bloomfield; open to all	[Pratt's Disposal]
2	SWF/YW	Town of Canandaigua	City of Canandaigua	Town & City (different times)
3	SWF/YW	Town of Farmington	None	Town
4	SWF	Town of Geneva	None	Town/[FORE (C&D debris only)]
5	SWF/YW	Town of Gorham	Village of Rushville	Town
6	SWF	Town of Hopewell	None	Town
7	SWF	Town of Manchester	Villages Manch/Shrtsvile/Clif Sprgs	Town
8	SWF/YW	Village/Town of Naples	Village/Town share; open to anyone	[Finger Lakes Disposal]
9A	SWF	Town of Richmond	Town of Canadice; open to anyone	[K&D Disposal]
9B	YW			Town
10	SWF	Town of Seneca	None	[Casella]
11	SWF/YW	Town of S Bristol	Village of Victor	Town
12	SWF	Town of Victor	None	Town
13	SWF/YW	Town of W Bloomfield	None	Town/[Shanks ENT (haul only)]
14	SWF/YW	Village of Phelps	Town of Phelps	Village
15A	LF	Ontario County	Operation, Management & Lease (OML) Arrangement w/Casella Waste Systems	[Casella]
15B	MRF			
15C	former MRF			

Notes:

- Select location visits included multiple sub-site visits reflected in site numbering.
- SWF = Solid Waste Facility; YW = on-site Yard Waste Processing Area/Brush Pit; LF = Landfill; MRF = Materials Recovery Facility; HHW = Household Hazardous Waste/Multi-Materials Collection Facility
- Shared Programs include municipalities and others (including out-of-County residents) that may participate in drop-off activities at a particular facility due to mutual agreement or general pay-per-use policy.

Most recyclables accepted at the municipal facilities are transferred to the County MRF. The County MRF currently accepts the following materials:

- Cardboard
- Clean boxboard (shoe boxes; cereal boxes)
- Office paper
- Magazines
- Newspapers
- Junk Mail
- Envelopes (manila and regular)
- File folders
- Soft cover books
- Hard cover books (remove covers)
- Card stock paper
- Aluminum cans
- Tin cans
- Glass bottles and jars
- Plastic bottles #1-#7

## LSWMP Goals and Objectives

The County's 2014 LSWMP lists the following 16 implementation tasks, which may also be interpreted as County-wide solid waste management goals and objectives:

1. Continue Landfill as Primary Disposal Option
2. Support Recycling at County-Owned Facilities
3. Encourage Yard Waste Composting
4. Promote Backyard Composting
5. Provide HHW Opportunities
6. Support Local Municipalities
7. C&D Debris Recycling
8. Encourage Product Reuse
9. Encourage Proper Disposal of Unique Wastes
10. Encourage Public Outreach & Education
11. Encourage Agricultural Plastics Research
12. Encourage & Monitor PAYT Throw Programs
13. Amend SW Mgmt & Recycling Local Law
14. Monitor Management of Animal Mortalities
15. Support Organics Management
16. Perform Biennial Recycling Surveys

### 1.3 STUDY DEVELOPMENT

This Study was prepared via a data analysis-driven technical approach that involved the following activities:

- Background research and document review;
- Stakeholder participation; and,
- Site visits.

### Background Review

We performed a detailed review of documentation provided by the County and individual municipalities regarding the municipal facilities and solid waste collection events. Initial information included the 2014 LSWMP and the 2015 inventory of municipal facilities and services as provided in the RFP for this Study. The County also sent requests for further information to individual municipal facility representatives. After review of the municipal responses, we communicated additional questions and clarifications to the individual municipal facility contacts as needed.

### Site Visits

Following the background review, we coordinated with the County and municipal facility managers and other local government representatives to conduct site visits at each of the 14 facilities as well as the Landfill. We conducted site visits and in-person interviews with stakeholders over a two-week period in January 2020.

Stakeholders interviewed included representatives of the towns and villages (e.g., town supervisors, highway department superintendents, facility attendants). For consistency, we conducted all interviews using a standard template as a basis for the discussions, which included questions regarding overall site impressions and performance, repair history, preventative maintenance, site infrastructure, material transportation, and financial considerations such as funding and capital improvement plan (CIP) budgeting.

Several facilities are not operated by the corresponding municipality, but instead use private contractors. These contractors were not available for on-site interviews during several of the site visits.

## Stakeholder Participation Process

We communicated with municipal facility contacts to clarify information in the background documentation, site visits, and/or interviews. In addition to the stakeholder interviews, a stakeholder review of the draft Study will be performed to increase the County's assurance that stakeholder opinions and concerns are addressed. This step will also give stakeholders a broader understanding of issues at other facilities, if they are not already so aware. The recommendations in this Study were developed to provide discrete items that the County may use to modify its LSWMP and specifically consider potential changes in municipal facilities and collection events.

## 2.0 FACILITY INVENTORY AND DATA SUMMARY

A summary of the municipal facilities is provided in the following tables and exhibits, which are included in this section of the report.

- Table 3. Materials Accepted Summary
- Table 4 provides an inventory of assets and other features of each facility.
- Inventory of Assets
- Table 5. MSW Handling and User Fees
- Table 6. Bulky Goods and C&D Debris Handling and User Fees
- Table 7. Facility Annual Operating Cost Summary
- Table 8. Recyclable Handling and User Fees
- Table 9. Yard Waste Management Summary
- Exhibit 3. Solid Waste Handling Summary (2019)
- Exhibit 4. Primary Funding Mechanisms
- Exhibit 5. Recyclables Handling Summary (2019)
- Exhibit 6. Special Materials Summary

A narrative describing further aspects of the municipal facilities is presented in **Appendix C**. Additional data tables, including a facilities overview, special materials summary, and matrix of facility attributes and key metrics, are included in **Appendix D**.

**Table 3 below** provides an update of the materials summary chart provided in the RFP, based on findings from the site visits and discussions with municipal personnel.

Table 3. Materials Accepted Summary

Site No.	Facility	Material Type								
		MSW	Recyclables	Bulk Waste	Yard Waste	C&D	Electronics	Tires	Scrap Metal	Other Items
1	Bristol	X	X	-	X	-	X	-	X	X
2	Canandaigua	X	X	X	X	X	X	-	X	X
3	Farmington	-	-	X*	X	X*	X*	X*	-	X
4	Geneva	X	X	X*	X	X*	-	-	X	X
5	Gorham	X	X	X	X	X	X	-	X	X
6	Hopewell	X	X	X	X	-	X	X	X	X
7	Manchester	X	X	X	X	-	X	X	X	-
8	Naples	X	X	X	X	X	-	X	X	-
9	Richmond	X	X	X*	X	X*	-	-	X*	-
10	Seneca	X	X	X	X	X	-	-	X	X
11	South Bristol	X	X	X	X	X	X	-	X	X
12	Victor	X	X	X	X	X	-	X	X	X
13	West Bloomfield	-	-	X	X	X	-	-	X	X
14	Village of Phelps	X	X	X*	X	X*	-	-	X	-

Note: \* indicates material acceptance is conditional based on seasonal availability and other factors

Table 4 provides an inventory of assets and other features of each facility.

Table 4. Inventory of Assets

Major Site Parameters						Material Handling Equipment by Category														Grand Total	Other Notable Equipment & Infrastructure
Property Identification			Buildings/Overhead Structures			Household, Bulky, C&D, & Tire Waste				Recycling/Diversion (including Yard Waste)					Spare/Unused During Site Visit						
Site No. <sup>1</sup>	Facility Name (Owner)	Size (ac.)	Qty.	Description	Foot-print (sf)	Compactors (qty. operating)	Qty. Packer Boxes	Qty. Open-tops	Total	Compactors (qty. operating)	Qty. Packer Boxes	Qty. Open-tops	# of CRRs	Total	YW/WG Pad Bunker, or Clearing	Qty. Packer Boxes	Qty. Open-tops	Qty. CRRs	Total		
1	Bristol	4.3	2	Attendant Cabin Storage Shed	225	-	-	-	0	-	-	1	3 (includes one trapezoidal can)	4	Clearing	-	-	-	0	4	Franklin stove; rear-loader collection vehicle for household waste, mobilized on operating days only
2	Canandaigua	23.0	2	New Building w/Add-on; Textiles Shed	2,100	packer box types (2)	2	1	3	packer box type (1)	1	1	-	2	Clearing/Bunker	4	4	-	8	13	Ticket machine, 250 & 2000-gal oil tanks, ROC roll-off covers (4), concrete blocks, 2008 Sterling roll-off truck
3	Farmington	21.2	1	Storage Building; offsite reuse store	2,100	-	-	-	-	-	-	-	-	0	Clearing	-	-	-	0	0	Mower, Surveillance cameras (2)
4	Geneva	2.1	2	Two storage sheds (one retrofitted for attendant use)	100	self-contained units (2)	2	-	2	2 self-contained unit types	2	1	-	3	NA	-	-	-	0	5	Kitchen scrap collection buckets, Wood platform for metals bin access, Bottle corral
5	Gorham	12.1	1	Unused former drive-thru building	1,200	-	-	3	3	-	-	1	3	4	Clearing/Bunker	-	1	3	4	11	Converted roll-off truck, Bottle corral, Wooden aggregate bay, High catch-fence (~100 ft)
6	Hopewell	6.1	1	Two bays at south end of highway garage	2,400	packer box type (1)	1	1	3	packer box type (1)	1	-	-	1	Bunker	-	-	-	0	4	Shop heater, Concrete blocks, Storage tables
7	Manchester	7.8	1	Recently improved drive thru shallow bay building	1,200	packer box type (1)	1	2	3	packer box type (1)	1	2	-	3	Bunker	-	-	-	0	6	Roll-off truck, custom-fabricated weigh system & card scanner, Floor scale, Concrete blocks, wheelbarrow
8	Naples	81.7	2	Drive-thru building w/long bays; Pavilion	4,600	-	-	2	2	Vertical OCC baler	-	3	-	3	Clearing	-	-	-	0	5	Floor scale, Outhouse, Pallet jack, Attendant "loft", Various berm/pole materials
9A	Richmond TF	5.0	1	Storage Shed	100	-	-	-	0	-	-	1	1	2	NA	-	-	-	0	2	Floor scale
9B	Richmond YW	5.0	NA	NA	NA	-	-	-	0	-	-	-	-	0	Clearing	-	-	-	0	0	-
10	Seneca	17.0	3	Storage, attendant, & large warehouse bldgs	2,560	packer box type; not used	Not on site	6	6	packer box type; not used	Not on site	2	4	6	Clearing	-	-	-	0	12	Bottle bill corral, Flag depository, Portal chutes (3)
11	South Bristol	37.9	3	Recycle & waste bldgs (1 ea.); storage shed	1,189	OLD packer box type (1)	1	1	2	MaxPak 608D vert OCC baler	-	3	1	4	Unknown	-	-	-	0	6	Broken CB-1500 oil heater, Bobcat 1650 skidsteer & attachments, Mower, Info kiosks, Concrete blocks
12	Victor	10.0	2	9-bay thru bldg; swap shop; attendant shed	6,500	packer box type (1)	1	3	4	4 self-contained unit types	4	6	-	10	Clearing/Bunker	2	5	-	7	21	Ash cans (2), Roll-off lid, Blocks, Roll-off truck, 300-gal oil tank, Carts, FW pail storage, Front loader, signboards
13	West Bloomfield	2.7	NA	NA	NA	-	-	-	0	-	-	-	-	0	NA	-	-	-	0	0	Wood platform for metals bin access
14	Village of Phelps	23.3	2	Large drive-through building; unused metal shed	1,600	packer box type (1)	1	-	1	packer box type (1)	1	1	-	2	Clearing/ Pad	-	-	-	0	3	Custom-fabricated weigh system & card scanner, concrete slab, Floor scale/cover, Surveillance cameras (4)

Notes: Footprint estimations reflect primary building only and Site Nos. 1-7, 9A, 12, and 14 were estimated from aerial photos. Remaining sites with buildings used Ontario County GIS Reports for square footage. CRR = Compartmentalized Recycling Roll-off; YW = yard waste; WG = white goods.

**Table 5 below** provides a summary of the handling methods for household MSW (mostly bagged) and user fee formats at each facility.

Table 5. MSW Handling and User Fees

Site No.	Facility	Operational Format		User Fee Format	
		Primary	Secondary (if on-site roll-off)	Primary	Secondary (if unit pricing employed)
1	Bristol	Direct-into-vehicle	NA	Unit	Volume – per bag
2	Canandaigua	On-site roll-offs	Compactors	None	NA
3	Farmington	NA – not accepted	NA	NA	NA
4	Geneva	On-site roll-offs	Compactors	Unit	Volume – per bag
5	Gorham	On-site roll-offs	Open tops	Fixed	NA
6	Hopewell	On-site roll-off	Compactor	Unit	Volume – per bag
7	Manchester	On-site roll-off	Compactor	Unit	Weight – per pound
8	Naples	On-site roll-off(s)	Open top(s)	Unit	Weight – per pound
9	Richmond	Direct-into-vehicle	NA	Unit	Weight – per pound
10	Seneca	On-site roll-offs	Open tops	None <sup>1</sup>	NA
11	South Bristol	On-site roll-off	Compactor	Unit	Volume – per bag
12	Victor	On-site roll-off	Compactor	Fixed	NA
13	West Bloomfield	NA – not accepted	NA	NA	NA
14	Village of Phelps	On-site roll-off	Compactor	Unit	Weight – per pound

**Note:** Town of Seneca incurs no costs due to its Landfill host agreement; facility operator Casella bears all costs.

**Table 6 below** provides a summary of bulky goods and C&D debris handling methods and user fee formats for each facility.

Table 6. Bulky Goods and C&D Debris Handling and User Fees

Site No.	Facility	Collection Format		User Fee Format	
		Type	Covering	Type	Special Notes
1	Bristol	Open top roll-off	NA	NA	NA
2	Canandaigua <sup>1</sup>	Open top roll-off	TF/roll-off covers	by Volume	\$2 coupons, item cost varies
3	Farmington	NA – event based <sup>2</sup>	NA	None	No user fees assessed
4	Geneva	Open top roll-off <sup>3</sup>	Uncovered	by Weight	15¢/lb; no mattresses
5	Gorham	Open top roll-offs	Uncovered <sup>4</sup>	by Volume	Varies; approx. 50¢/cu. ft.
6	Hopewell	Open top roll-off	Covered by TF	by Volume	Varies; some discretion
7	Manchester	Open top roll-off	Covered by TF	by Weight	14¢/lb; wheelbarrow used
8	Naples	Open top roll-off	Covered by TF	Unit	10¢/lb; contractor operates
9	Richmond	NA – not accepted	NA	NA	NA

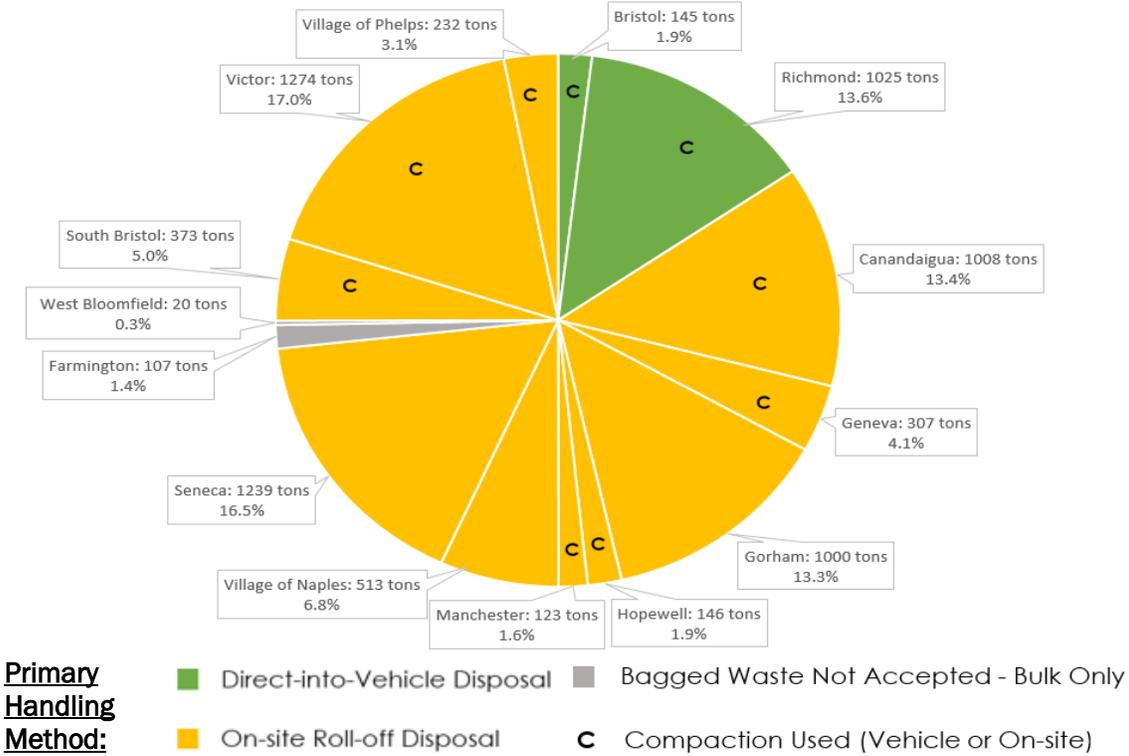
Site No.	Facility	Collection Format		User Fee Format	
		Type	Covering	Type	Special Notes
10	Seneca	Open top roll-off	Uncovered <sup>4</sup>	None <sup>5</sup>	No fee; OML Agreement
11	South Bristol	Open top roll-off	Covered by TF	by Volume	Varies; no fee <18 cu. ft.
12	Victor	Open top roll-off	Covered by TF	Fixed	\$100 extra/yr; up to 5 trips
13	West Bloomfield	Open top roll-off	Uncovered	None	Primary purpose of facility
14	Village of Phelps	NA – event based	NA	by Weight	15¢/lb

**Notes:**

1. Town of Canandaigua allows the City of Canandaigua to use their facility for select items, including C&D.
2. Town of Farmington has semi-annual “Spring/Fall Cleanup” events primarily for the collection of C&D and white goods.
3. C&D program seasonal due to high summer demand and need for space in winter for salt barn operations.
4. Towns of Gorham/Seneca service containers by end of day; same open-tops used for household waste.
5. Town of Seneca has no bulk/C&D disposal limits or costs due to Landfill host agreement with Casella.

**Exhibit 3 below** graphically presents the quantities and methods of solid waste handling for each facility. Percentages are the facility quantity compared to the total solid waste managed at all 14 facilities.

Exhibit 3. Solid Waste Handling Summary (2019)



- Notes:**
1. Data is from NYSDEC transfer facility reports or other sources unless estimated as described below.
  2. Town of Richmond data not available; assumed to accept 2x waste accepted by Naples facility due to relative populations, location in same area of County, and similar acceptance formats (PAYT, open to all).
  3. Town of Gorham data not available; assumed to accept similar quantity of waste as Canandaigua and Richmond due to similar number of estimated users.
  4. Town of West Bloomfield data not available; estimated at five tons per container pull at four pulls per year.
  5. Primary operational format given for bagged MSW only, not bulk or C&D debris.

Table 7 below summarizes recent annual operating costs by facility.

Table 7. Facility Annual Operating Cost Summary

Site No.	Facility	Annual Operating Costs (\$/year)				
		2016	2017	2018	2019	Average
1	Bristol	\$5,468	\$11,658	\$6,098	\$12,203	\$8,857
2	Canandaigua	\$223,729	\$187,355	\$258,973	\$236,333	\$226,598
3	Farmington	\$16,415	\$15,203	\$36,586	\$33,000	\$25,301
4	Geneva	\$34,021	\$67,531	\$48,886	\$69,178	\$54,904
5	Gorham	\$132,611	\$161,989	\$156,500	\$145,756	\$149,214
6	Hopewell	\$21,250	\$21,250	\$21,250	\$21,250	\$21,250
7	Manchester	\$26,034	\$26,292	\$65,840	\$33,855	\$152,021
8	Naples <sup>1</sup>	\$500	\$500	\$500	\$500	\$500
9	Richmond <sup>2</sup>	-	\$5,000	\$16,397	\$6,000	\$7,632
10	Seneca <sup>3</sup>	-	-	-	-	-
11	South Bristol	\$45,922	\$38,039	\$48,173	\$39,663	\$42,949
12	Victor	\$407,859	\$402,688	\$460,193	\$387,874	\$414,654
13	West Bloomfield	\$8,814	\$13,048	\$12,688	\$12,688	\$11,810
14	Village of Phelps	\$59,152	\$53,262	\$103,858	\$64,900	\$70,293

**Notes:**

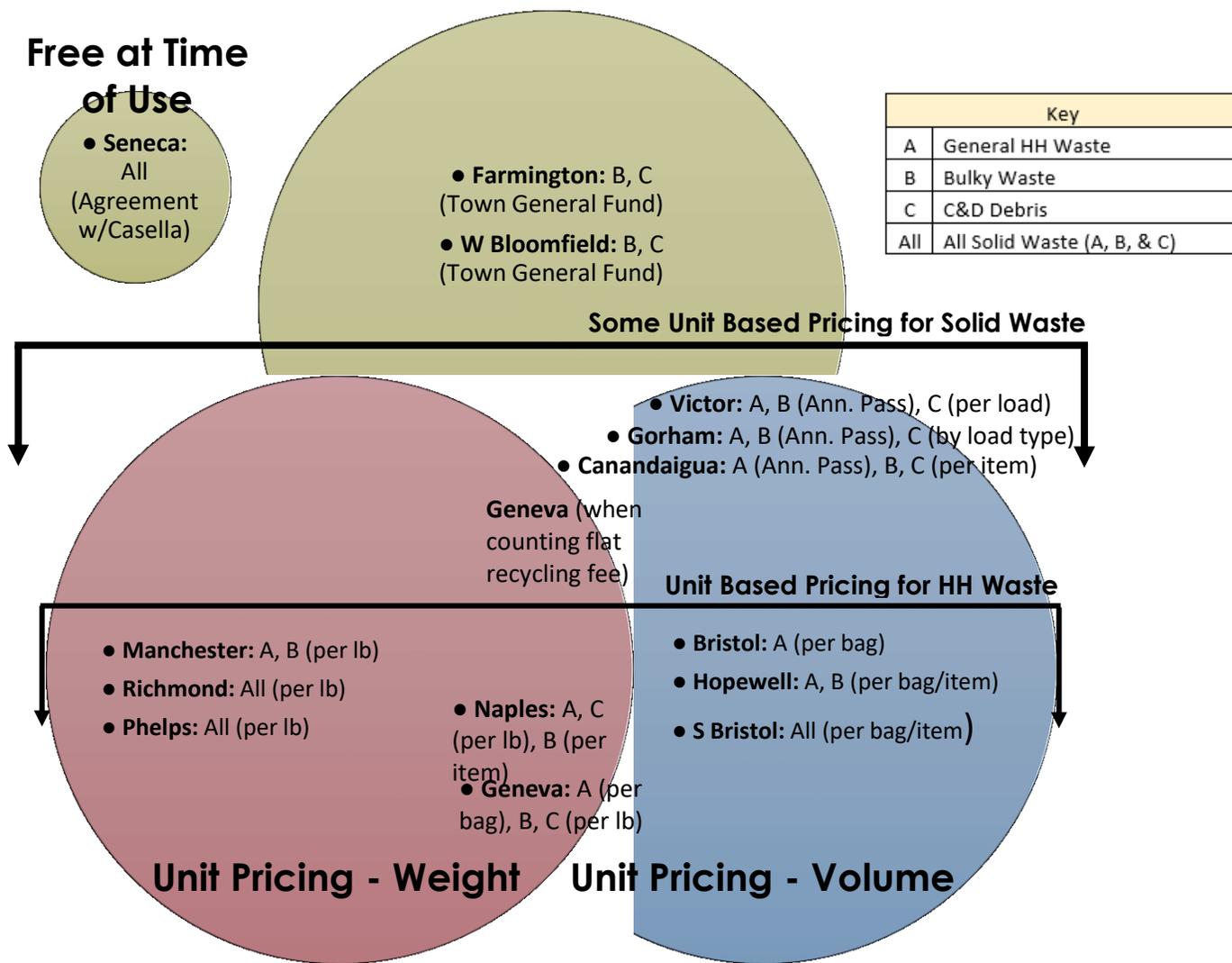
<sup>1</sup> Annual operating costs for the Naples facility includes only \$500/year budget from Village for incidental costs; facility operator costs were not provided. Average operating cost represents only the Village incidental cost allowance. Many of the facilities require upgrades for long-term operations, and most are heavily subsidized by municipal general funds; a few at over \$100,000 each year.

<sup>2</sup> 2016 operating costs for Richmond facility were not provided. Average operating cost represents average of 2017-2019 operating costs.

<sup>3</sup> Annual operating costs for Seneca facility were not provided, but are not incurred by the County; these costs are covered by Casella as part of its Landfill operation contract with the County.

Exhibit 4 below presents the primary funding mechanisms as well as the format of user fees (if applicable), some of which overlap, for each facility.

Exhibit 4. Primary Funding Mechanisms



**Table 8 below** provides a summary of traditional recyclables handling methods and user fee formats (where applicable) for each facility. Methods for other materials, such as scrap metal, plastic film, e-waste, and organics, are detailed in later sections.

Table 8. Recyclable Handling and User Fees

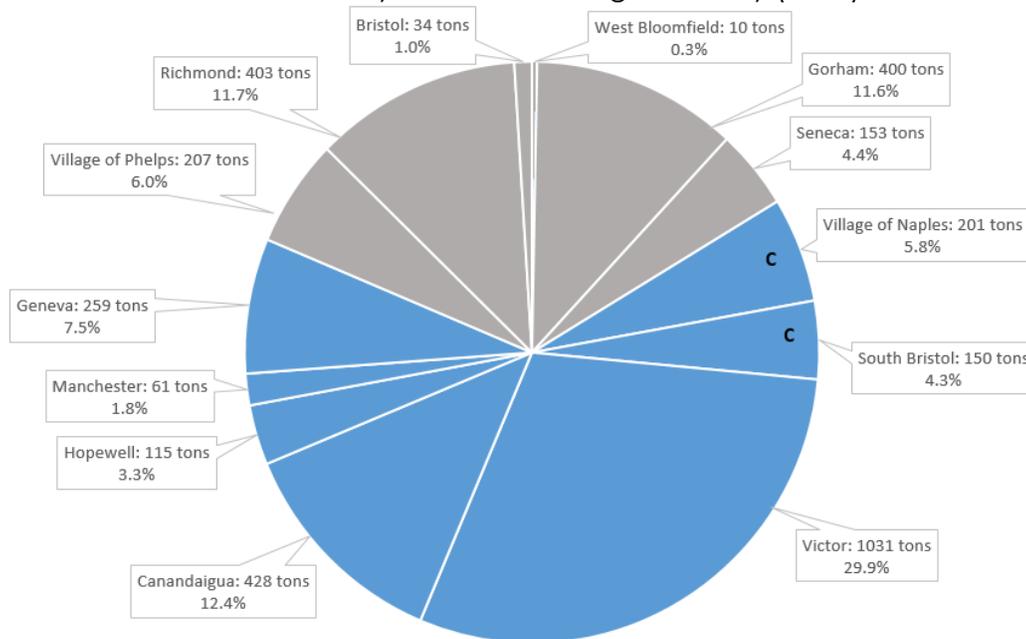
Site No.	Facility	Collection Format		User Fee	Special Notes (CM = Co-mingled)
		Format	Type		
1	Bristol	On-site roll-offs	CRRs <sup>1</sup>	None <sup>2</sup>	Mixed paper; CM containers
2	Canandaigua	On-site roll-off	Compactor	None	Single stream
3	Farmington	NA - not accepted	NA	NA	NA
4	Geneva	On-site roll-offs	Compactors	Annual	Single stream; rec. permit \$15/yr <sup>3</sup>
5	Gorham	On-site roll-offs	CRRs	None <sup>3</sup>	Single stream
6	Hopewell	On-site roll-off	Compactor	None	Single stream
7	Manchester	On-site roll-off	Compactor	None	Single stream
8	Naples	On-site roll-offs	Mixed	None	CM paper & containers; baled OCC
9	Richmond	On-site roll-offs	Open tops	None	OCC; CM paper & containers
10	Seneca	On-site roll-offs	CRRs	None	Single stream
11	South Bristol	On-site roll-offs	Mixed	None	Paper; CM containers; baled OCC
12	Victor	On-site roll-offs	Compactors	None <sup>4</sup>	Paper; CM containers; OCC
13	West Bloomfield	NA - not accepted	NA	NA	NA
14	Village of Phelps	On-site roll-off	Compactor	None	Single stream

**Notes:**

1. Compartmentalized Recycling Roll-offs
2. Town of Bristol recycling only allowed for free with disposal of household waste; contractor enforced.
3. Town of Geneva only municipality to charge for recycling independently from other collected materials.
4. Town of Gorham and Town of Victor residents must purchase waste decal to recycle.

**Exhibit 5 below** presents the quantities and methods for recyclables handling for each facility. For the totals, all recyclable/diverted material was included, regardless of “Zero Sort” versus individual recyclables such as mixed paper, plastics, cans, and OCC. Percentages are given as a portion of total recyclables managed at all 14 facilities.

Exhibit 5. Recyclables Handling Summary (2019)



**Primary Handling Method:**

- Compactor(s) Used for Collections
- Roll-off(s) Only Used for Collections
- c Cardboard Compactor Only

**Notes:**

1. Data from NYSDEC transfer facility reports or other sources unless estimated as described below.
3. Town of Gorham data not available; assumed to accept similar quantity of waste to Canandaigua and Richmond facilities due to similar number of estimated users.
2. Town of South Bristol data not available; assumed to have the same estimated recycling rate as Naples facility due to location in same area of County and similar acceptance formats (i.e., PAYT).
4. Town of West Bloomfield data on collected scrap metal estimate based on discussion with Town staff.
5. In general, recyclables compactors accept “Zero Sort” single stream recyclables. Exceptions include the two OCC balers (one at Village of Naples and one at Town of South Bristol facilities) and four compactors accepting various different comingled recyclable material streams at Town of Victor facility.

Additional material streams collected at the facilities (other than yard waste) are presented and summarized in **Exhibit 6 below**.

### Exhibit 6. Special Materials Summary



- **Electronic Waste:** Collected by a majority of the 14 municipal programs investigated in the Study. Only **Naples, Richmond, Seneca, W Bloomfield and Phelps** do not offer e-waste drop-off. Generally the service is offered for a fee and in one case (Geneva), only batteries are accepted. **Victor** asks residents to drop off e-waste directly at E-WASTE+, the most frequented vendor in the County, for efficiency because it is located within its jurisdiction.



- **Scrap Metal:** Of the 14 municipal facilities, only **Farmington** does not accept scrap metal due to its collection event format. Only one transfer station, **Victor**, source-separates scrap metal by type (e.g., aluminum, ferrous), and has a locking lid for more valuable metal commodities. **Freon/CFC-containing white goods** are managed separately from regular appliances (usually for a fee) and are **not accepted at Canandaigua, Farmington, Geneva, Manchester, S Bristol, and Victor.**



- **Textiles and Swap Shops:** Although it does not have collections for most material types, **Farmington** does have a dedicated swap shop facility for reusable items. This facility is co-located with its Parks and Recreation Department. **Victor** also has a swap shop, which is a large building in front of its solid waste facility. Other facilities maintain informal material exchanges, such as **S Bristol, Gorham, and Hopewell.** **Canandaigua** does not have a swap shop, but operates a textile drop-off operation in unique partnership with a local non-profit.



- **Food Scraps:** Collected at four facilities - **Canandaigua, Geneva, Seneca, and Victor.** **Gorham** has also introduced a pilot food scrap collection for curbside pickup. This material is delivered to local vermicomposting operations where it is converted to a soil amendment and fertilizer for commercial sale.



- **Plastic Film:** Plastic film (from clean and dry sources) is collected at two facilities - **Canandaigua and Victor.** This material is very lightweight and thus is typically collected by private businesses such as grocery stores. Clean bags used to transport recyclables for drop-off may be diverted to film recycling containers.



- **Waste Motor Oil:** Typically collected by private sector locations, such as automotive service stations. Two facilities also accept waste motor oil - **Canandaigua and Victor,** though it is also collected from municipal vehicles and equipment at a majority of local highway department complexes. **Canandaigua** transfers used oil from its 300-gallon day tank into a 2,000 gallon storage tank.



- **Miscellaneous:** Miscellaneous materials were observed to be collected at various transfer facilities. Items for repair, propane canisters/tanks, egg cartons for reuse, shredded paper, ashes/embers/burnt coals, flags for retirement, fire extinguishers and books were just some of the items available for drop-off and reuse depending on the needs of each municipality.

**Table 9 below** summarizes yard waste management activities at the municipal facilities.

Table 9. Yard Waste Management Summary

Site No.	Facility	Management Format		Processing Format	
		Material Acceptance	Location	Size (S/M/L/XL); Process/Trans. Freq.	Vendor/ Acceptor
1	Bristol	Piles; YW & bagged leaf	TF/Closed LF	M; Annual mulching	GR <sup>5</sup>
2	Canandaigua <sup>1</sup>	Pile; 1 legacy, 1 bunker	TF/Hwy Dept.	M; Annual mulching <sup>6</sup>	Empire ENT.
3	Farmington	Piles; YW & leaf/grass	TF/Closed LF	L; Annual mulching <sup>6</sup>	GR
4	Geneva <sup>2</sup>	Pile; any YW/brush type	TF/Hwy Dept.	S; 3 transfers/wk	Geneva City
5	Gorham	Pile	TF/Hwy Dept.	L; mulching <1x/yr	NA <sup>7</sup>
6	Hopewell	Pile; no leaves/grass	TF/Hwy Dept.	S; ad hoc transfer	Residents
7	Manchester <sup>2</sup>	Roll-off; no leaves/grass	TF/Hwy Dept.	S; ad hoc transfer	Unknown
8	Village of Naples <sup>2</sup>	Piles; any YW/brush type	TF/Closed LF	XL; mulching <1x/yr	NA <sup>7</sup>
9	Richmond <sup>3</sup>	Piles; YW & leaf/grass	Indepen. site	M; Annual mulching <sup>6</sup>	GR
10	Seneca	Roll-offs/pile; any type	TF/Closed LF	M; ad hoc transfer	Casella
11	South Bristol <sup>2</sup>	Pile	TF/Closed LF	SCS did not observe	Unknown
12	Victor <sup>2</sup>	Roll-off/pile; YW & leaf/grass	TF/Hwy Dept.	S; transferred on-site <sup>6</sup>	GR
13	West Bloomfield	Pile	TF/Hwy Dept.	M; Annual mulching	Prev. GR <sup>8</sup>
14	Village of Phelps <sup>4</sup>	Pile; 1 ea. YW & bag leaf	TF/Closed LF	L; Annual mulching <sup>9</sup>	Unknown <sup>10</sup>

Notes:

1. Town of Canandaigua recently relocated their yard waste acceptance area from behind the facility to a more easily accessible location along the main highway garage - administration building - facility traffic loop.
2. Towns of Geneva, Manchester, Naples, South Bristol, and Victor have additional facilities for brush management located separately from the yard waste collections areas.
3. Town of Richmond maintains a dedicated site (#9B) for yard waste management independent of its registered solid waste facility (#9A); it sometimes share resources with Town of Canadice's brush pit for select Town-managed materials.
4. Village of Phelps accepts leaves/grass in its main yard waste/brush pile; this appears to incur additional costs. Other facilities may employ similar tactics, though it is unclear exactly which other facilities do so based on our site visits.
5. GR = Green Renewables, Inc., of Village of Manchester.
6. Towns of Canandaigua, Farmington, Richmond, and Victor separate collection of woody waste/brush from compostable materials such as leaves, lakeweed, and grass clippings to allow limited composting via extended duration static piles.
7. Not applicable due to extended duration of time since previous processing event.
8. Historically, Town of West Bloomfield has used Town of Bristol's grinding contract; this does not appear to be the case moving forward and the future vendor has not yet been selected.
9. Village of Phelps was the only facility confirmed to employ twice-ground mulching for a higher product quality (and higher cost).
10. Unknown based on background research and site visits.

### 3.0 FACILITY ANALYSIS AND EVALUATION

One potential regional facility model is to designate or relocate one existing facility within each “quadrant” of the County, plus a central facility (i.e., in or near Canandaigua, which is located near the geographic center of the County). This “Hub-and-Spoke” resource recovery model is often used as an efficient format for public material drop off systems. Existing plans for new/expanded facilities could be leveraged to develop regional facilities. County solid waste funds currently used to improve various facilities on a “piecemeal” basis could instead be focused to develop modern, permanent, regional facilities that will benefit all residents in the County. These facilities would be located within a 15-minute drive from the majority of County residents.

Some municipal representatives expressed interest in the concept of converted regional full-service convenience center facilities in lieu of the current format of individual municipal facilities. In some cases, separating trash and recycling facilities from composting and mulch processing facilities within particular areas of the County improve existing operations, based on existing infrastructure and available property/space. Nothing would prohibit individual locations located at the perimeter of the County from continuing to operate facilities, particularly to offer small-scale programs to residents as necessary.

This section provides an in-depth review of the facilities we believe could form part of the Hub-and-Spoke system for the County, and analyses the impacts likely to result from such consolidation.

#### 3.1 EXISTING FACILITIES USAGE METRICS

As part of considering the consolidation of facilities, an analysis of the existing usage and capacity of each facility was performed. An analysis of estimated facility usage following facility consolidation, and estimation of consolidated facility throughput versus facility capacity, was also performed. Table 10 below summarizes current utilization of each facility by annual amount of MSW and recyclables collected, at each facility, and estimated number of users/customers and households served by each facility each year.

Table 10. Current Facility Usage Summary

Region/Facility Name	MSW Collected (tpy)	Recyclables Collected (tpy)	Estimated # of Households	Users/year
<b>Southwest</b>				
South Bristol	373	Unknown	640	300
Naples	513	201	1,003	200
Richmond	Unknown	1,836	2,061	400 <sup>1</sup>
<i>Total</i>	<i>&gt;886</i>	<i>&gt;2,037</i>	<i>3,704</i>	<i>900</i>
<b>Northwest</b>				
Victor	1,274	1,031	5,899	1,700
West Bloomfield	Unknown	Unknown	993	66 <sup>2</sup>
Farmington	107	Unknown	4,949	928
<i>Total</i>	<i>1,381</i>	<i>&gt;1,031</i>	<i>11,841</i>	<i>2,694</i>
<b>Central</b>				
Canandaigua	1,008	428	4,542	1,223
Bristol	145	34	2,149	144 <sup>3</sup>
<i>Total</i>	<i>1,153</i>	<i>462</i>	<i>6,691</i>	<i>1,367</i>

Region/Facility Name	MSW Collected (tpy)	Recyclables Collected (tpy)	Estimated # of Households	Users/year
<b>Northeast</b>				
Manchester	123	61	3,618	845
Hopewell	146	115	1,422	95
Phelps	232	207	2,610	900
<i>Total</i>	<i>501</i>	<i>383</i>	<i>7,650</i>	<i>1,840</i>
<b>Southeast</b>				
Gorham	Unknown	Unknown	1,807	1,000
Geneva	307	259	1,388	492
Seneca	1,239	153	958	572
<i>Total</i>	<i>&gt;1,546</i>	<i>&gt;412</i>	<i>4,153</i>	<i>2,064</i>

**Notes:**

1. Estimated 400 customers/year served at Richmond facility, based on population of Richmond approximately 2x population of Naples.
2. Estimated 66 customers/year served at West Bloomfield facility, based on estimated annual customers at Hopewell facility, pro-rated against estimated number of households in Hopewell versus West Bloomfield.
3. Estimated 144 customers/year served at Bristol facility, based on estimated annual customers at Hopewell facility, pro-rated against estimated number of households in Hopewell versus Bristol.

### 3.2 SUMMARY OF SELECT FACILITIES

This section provides a summary of our observations and findings at the following municipal facilities, which we propose would form a Hub-and Spoke model for the County:

- Town of Canandaigua
- Town of Farmington
- Town of Gorham
- Town of Manchester
- County Landfill/Town of Seneca
- Town of South Bristol
- Town of Victor
- Village/Town of Phelps

Summaries for other facilities visited are included in Appendix E.

#### Site #2: Town of Canandaigua

The Town’s capability and willingness to work cooperatively, both with the County and another municipality, provides a good basis for potential future relationship-building and operational synergies that could enhance services and/or reduce costs to residents (however, note that when the County held a HHW collection event at the site in September 2018, it resulted in traffic queues in excess of the site capacity). The Town is also working with a consultant to improve many aspects of the facility programming, education and outreach, reflecting a commitment to sustainable operations and a high level of service.

#### Strengths

- **Location and Site Configuration:** Due to its relative centrality and co-location with highway and other town department infrastructure, Town personnel and equipment can be used for

maintenance of site infrastructure and management of stored on-site materials. An example of this was observed during our site visit when a highway department employee used an excavator to compact the material within the bulky waste collection container. Town activities associated with waste operations appear to have adequate space away from highway operations so that there are few negative interferences and many positive synergies from the arrangement. However, residential traffic during both Town and City waste collection times may sometimes interfere with overall complex operations, which has resulted in the Town investigating the development of an alternative facility located on a nearby Town-owned property).

- **Compaction:** The site uses compactors for the collection of MSW and recyclable materials. This collection format increases the efficiency of the operation by reducing turnaround times, increasing transportation efficiencies and reducing congestion at the Landfill (i.e., time spent waiting to unload containers for disposal). The Town uses on-site excavation equipment to compact bulky items and metals collected in open-top containers, as shown in **Exhibit 7**.
- **Yard Waste Management:** The practices of stockpiling and managing accepted yard waste on-site reduces potential inefficiencies from excessive handling and transfer of lightweight material. Returning compost or finished mulch product to citizens or for use in municipal operations encourages sustainable, circular materials management practices while reducing costs to the Town.
- **Utilization/Operating Hours:** The facility is open three days per week (12 hours per week). It is only open to the City of Canandaigua for three hours per day on two Saturdays per month, or effectively 1.5 hours per week for the shared program. While the Town's program has an estimated participation rate of 27% of Town households, we suspect that the limited operating hours for City residents hinders their participation (note that separate City resident participation data was not available). The limited operating hours were set due to facility layout and design, and have resulted in traffic issues.
- **Service Lines:** A wide range of materials are accepted at the Town's facility, a range rivaled by only a few other municipalities in the County. An example of this is clean film, as shown in **Exhibit 8**. However, residents must travel to a different facility for proper waste tire disposal, the nearest being Manchester. This represents a 15-minute drive (each way) and the resident would need to create an account with the Town, requiring a minimum, non-refundable deposit of \$30.
- **Other:** Overall, the facility uses good methods for material collections and accepts a wide range of materials in pursuit of waste diversion. Operation of its own roll-off vehicle as shown in **Exhibit 9** helps enhance the efficiency and autonomy of the program. Recent planning and advertising efforts indicate foresight and willingness to display ongoing improvement. The purchase of additional property for facility relocation or expansion may be beneficial as the Town and City continue to experience a high growth rate relative to other County areas. Town staff continually collect and analyze data in pursuit of program improvements.

Exhibit 7. Town of Canandaigua Use of On-site Excavator to Compact Bulky Waste



Exhibit 8. Town of Canandaigua Clean Film Collection for Recycling

Exhibit 9. Town of Canandaigua Dedicated Roll-off Vehicle for Servicing Containers



## Weaknesses

- **System User Fees and Net Costs:** User fees from the facility do not appear to cover operational costs. Potentially unallocated costs from other municipal departments or municipalities may not be included in this Study and major capital costs, such as facility building enhancements in the past decade, appear to have been heavily subsidized by general funding or other sources unrelated to facility operations.
- **Waste Reduction and Diversion:** In accordance with NYSDEC regulations, registered facilities must allow for the collection of source-separated recyclables at the facility. While the facility meets this requirement, the program does not appear to achieve expected levels of waste reduction and diversion. We estimate the program experiences the third highest per capita waste collection of all the County municipal facilities for which information was available, with an estimated 1.6 tons of waste collected per user of the program. However, the program has the third lowest estimated recycling rate (27%, excluding yard waste) of all the facilities for which information was available.
- **Unit Costs:** The program has the second highest estimated net cost per user of all the facilities for which information was available, with an estimated net annual cost to the Town of \$157 per user. This figure does not include Town General Fund transfers as revenues in its calculation, so may reflect insufficient user funding relative to overall facility costs. This may not be an issue for the Town. The program has a comparatively low cost per ton of waste collected (\$120 per ton), possibly in part due to the relatively high waste generation rate per user (and resulting economy of scale).
- **Municipal Tax Base:** City of Canandaigua residents benefit from utilizing the facility for a select few service offerings in exchange for a City payment to the Town of roughly \$10,000 per year. Given that the facility does not appear to break even when operational costs, let alone capital costs, are taken into account, this arrangement may be perceived as unfair by some and may place an undue cost burden on Town residents who may pay some of the share of users from outside the jurisdiction. In addition, the lack of break-even operational (let alone potential capital) costs and subsequent general fund transfers due to a lack of adequate user fees could be perceived as unfair by certain residents who do not participate in the program.
- **Other:** Current facility user parking and queuing practices are concerning. During peak periods of traffic, facility operations results in users parking vehicles up to five lanes wide and several vehicles deep in front of the facility. During the site visit, SCS observed residents cautiously walking between vehicles as some cars arrived or exited the queue. In addition, it was noted that vehicles often became trapped in place until the traffic proceeded in front of them, causing delayed egress from the site.

## Site #3: Farmington

Use of yard waste and Swap Shop reusable items facilities does not appear to be tracked by participant user or ton/cubic yard of material collected. Therefore, unit metrics for Town of Farmington are incomplete, and the lack of data is reflected in the assessment below. All metrics were calculated based on the twice-yearly clean-out events. SCS recommends the Town track the use of its solid waste facilities from year to year in some manner.

The Town's capability and willingness to work cooperatively, both with the County and among different town departments, provides a good basis for potential future relationship building and operational synergies that could potentially enhance services or reduce cost to residents. The

implementation of varied programs related to solid waste management which reflecting a commitment to a high level of service provision by the Town.

## Strengths

- **Yard Waste Management:** The practices of stockpiling and managing accepted yard waste on-site reduces potential inefficiencies from excessive handling and transfer of lightweight material. Returning compost or finished mulch product to citizens or for use in municipal operations encourages sustainable, circular materials management practices while reducing costs to the Town. The Town of Farmington maintains one of the strongest organics management programs of any municipal transfer facility in the County, and is positioned well for future program growth from a facility infrastructure standpoint.
- **Utilization/Operating Hours:** The facility is open four hours per day, six days a week, for a total of 24 hours per week. This appears adequate for a yard waste collections facility, though residents working during the day may not be able to participate in the program. The program has a good estimated participation rate compared to all the other transfer facilities for which there was such information available, with an estimated 19% of program households using the site.
- **Other:** The development of a Swap Shop near its town hall signals a commitment to waste reduction and reuse by the Town of Farmington. Should the Town pursue additional offerings, the operations of this facility could serve as a preliminary basis for expansion into other material collections services typically offered during weekly or monthly timeframes at municipal transfer facilities within the County.

## Exhibit 10. Farmington Transfer Facility Traffic Control Elements



### Weaknesses

- **Location and Site Configuration:** Due to its separate location, highway department personnel and equipment used for maintenance of site infrastructure and management of stored on-site materials must be independently mobilize to the site, consuming municipal resources.
- **System User Fees & Net Costs:** The Town does not charge its users a fee to drop off yard waste nor to dispose of various items during twice-annual material collection events. Therefore, operational revenues to the Town do not appear to break-even with operational cost, as there are no operational revenues. Note that potentially unallocated costs from other municipal departments or municipalities may not be accounted for in this assessment and that both operational and capital costs are paid for through general funding or other sources.
- **Service Lines:** Residents must travel to an alternative facility for routine discard of all material types except yard waste unless they contract with a private hauler for curbside collections. The nearest municipal transfer facility program for which Town of Farmington residents are eligible is Manchester. This represents a 15 minute one-way drive and the resident would need to create an account with the Town with a minimum, non refundable deposit of \$30.
- **Municipal Tax Base:** The lack of break-even operational (let alone potential capital) costs and subsequent general fund transfers due to a lack of adequate user fees could be perceived as unfair by certain residents who do not participate in the programs.

- **Other:** Town of Farmington's facility is not registered with NYDEC as a materials transfer facility, although because of its format, it's not clear if it is required to register (and thus report material quantities annually to the State).

## Site #5: Gorham

Material quantities managed at the transfer facility were not made available to SCS. Therefore, unit metrics for Town of Gorham are incomplete, and the lack of data is reflected in the assessment below.

The Town's capability and willingness to work cooperatively, both with the County and other municipalities, provides a good basis for potential future relationship building and operational synergies that could potentially enhance services or reduce cost to residents. The Town works closely with its stakeholders to improve many aspects of the transfer facility programming, education and outreach, reflecting a commitment to sustainable operations and a high level of service provision by the Town.

### Strengths

- **Location and Site Configuration:** Due to its relative centrality and co-location with highway department infrastructure, personnel and equipment are able to be used for maintenance of site infrastructure and management of stored on-site materials. Town activities associated with waste transfer appear to have adequate space away from highway operations. For now, there appear to be few negative interferences and many positive synergies from the arrangement (however, residential traffic during both collection times may sometimes interfere with overall complex operations, and this has resulted in the Town pursuing the potential development of an alternative facility located on Town-held property nearby). As the Town pursues expansion of its highway garage, the space available for transfer facility activities is anticipated to decrease, which may present traffic congestion issues relative to the current situation.
- **Utilization/Operating Hours:** The facility is open three days a week for a total of 16 hours. In addition, the Town's program has an excellent estimated participation rate of 61% of Town households. SCS suspects that the operating days and hours is adequate for Town resident participation. The only downside with the site in regards to user capacity appears to be the major traffic issues during times of peak use when backups occur onto the main road.
- **Service Lines:** A wide variety of materials are accepted at the Town's facility, a range rivaled by only a few other municipalities in the County. However, residents must travel to an alternative facility for proper tire discard, the nearest of which is Manchester (or perhaps out-of-County). This represents a 17 minute one-way drive and the resident would need to create an account with the Town with a minimum, non refundable deposit of \$30. Tires were observed to be stockpiled, presumably from Town highway operations.
- **Other:** Recent indications of facility planning and program outreach, including designing and costing an alternative facility and implementing a pilot source-separated food scraps collections program, indicate foresight and willingness to display continuous efforts of improvement. The purchase of additional property for relocation or expansion and stockpiling of soil for future site improvement may allow enhanced operational efficiencies and provision of services.

Exhibit 11. Gorham Facility Litter Catch Fence



## Weaknesses

- **Compaction:** The site does not use compactors for the collection of household waste as well as traditional recyclable material collection. This collection format increases the efficiency of the operation by reducing turnaround times, increasing transportation efficiencies, and reducing time spent at the Landfill waiting to unload containers for disposal.
- **System User Fees & Net Costs:** Operational revenues to the Town do not appear to break-even with operational cost. Note that potentially unallocated costs from other municipal departments or municipalities may not be accounted for in this assessment and that major capital costs, such as the cost of preliminary design and construction cost estimate for a future replacement facility, appear to be heavily subsidized by general funding or other sources unrelated to transfer facility operations.
- **Municipal Tax Base:** Users from the shared program of Village of Rushville (approximately 1/3 of the Village is part of Ontario County) benefit from utilizing the facility. Given that the Town's facility does not appear to break even when operational costs, let alone capital costs, are taken into account, this arrangement may be perceived as unfair by some and may place an undo cost burden on Town residents who may pay some of the share of users from outside the jurisdiction. In addition, the lack of break-even operational (let alone potential capital) costs and subsequent general fund transfers due to a lack of adequate user fees could be perceived as unfair by certain residents who do not participate in the program (although the Town's high estimate program participation rate negates this somewhat).

- **Other:** Current practices at peak periods of traffic during transfer facility operations are concerning, primarily the backups described as reaching nearly to the intersection with Yautzy Rd and Lake to Lake Rd. A turn lane or taper may be warranted for ingress to the facility, at least until an alternative site can be developed.

## Site #7: Town of Manchester

Note that the Town of Manchester's facility is not currently registered as a NYSDEC transfer facility, and is the only such facility in the County regularly accepting waste.

The Town's capability and willingness to work cooperatively, both with the County and other municipalities, provides a good basis for opportunities for future relationship-building and operational synergies that could potentially enhance services or reduce costs to residents. The Town has also worked with a local business to implement a custom, weight-based unit pricing system that reflects a commitment to financially sustainable operations, incentivizing waste reduction and diversion, and an overall provision of a high level of service.

### Strengths

- **Location and Site Configuration:** Due to its co-location with highway and other town department infrastructure, personnel and equipment are shared for maintenance of site infrastructure and management of materials stored on-site. Town activities associated with waste operations appear to have adequate space away from highway operations such that there are few negative interferences and many positive synergies from the arrangement.
- **Compaction:** The facility uses compactors for MSW as well as traditional recyclable material. This format increases the efficiency of the operation by reducing turnaround times, increasing transportation efficiencies, and reducing time spent at the Landfill waiting to unload containers for disposal.
- **System User Fees and Net Costs:** Operational revenues to the Town appear to exceed operational costs year over year, and Town personnel report a reserve fund for contingencies or capital improvements. Manchester and Phelps both use the unit pricing system and both Towns report revenues exceeding costs. Note there may be unallocated costs from other municipal departments or municipalities not included in this assessment.
- **Waste Reduction and Diversion:** In accordance with NYSDEC regulations, registered transfer facilities must allow for the collection of source-separated recyclables at the facility. This facility appears to meet this requirement and encourages waste reduction and diversion via the unit pricing system. The program results in the second lowest estimated per capita waste collection of all the County municipal facilities for which their information was available, with an estimated 0.15 tons of waste collected per user of the program. In addition, the program has an estimated recycling rate of 33% (excluding yard waste). Components of the unit weighing system are shown in **Exhibit 10** and **Exhibit 11 below**.
- **Unit Costs:** The program appears to achieve cost-efficient operations. The program has the lowest estimated net cost per user of all the County municipal facilities for which information was available, with an estimated net cost to the Town of -\$6 per user (i.e., \$6 per user of net income is generated on average after revenues and expenses). Likely in part due to its low rate of waste generation per user, the program has a comparatively high cost per ton of waste collected (\$274 per ton), the third highest of all the County municipal facilities for which information was available. However, as a result, it also has a high revenue per ton of

waste at \$313 per ton, the highest of all the County municipal facilities for which information was available.

- **Service Lines:** A wide variety of materials are accepted at the Town's facility, a range rivaled by only a few other County facilities. However, residents must travel to an alternative facility for C&D debris disposal, the nearest of which is the Landfill. This represents a 17-minute one-way drive.
- **Municipal Tax Base:** The Town and its shared programs benefit from the operational self-sufficiency of the facility. Given that the facility appears to more than break even when operational costs and reserves funding are taken into account, this arrangement may be perceived as fair because the users who benefit from it also pay for it. Therefore, it does not place an undue cost burden on Town residents who do not participate in the program.
- **Other:** Overall, the facility practices good methods of materials collection and accepts a wide range of materials in pursuit of waste diversion. The 2016 facility redevelopment efforts indicate foresight and willingness to display continuous efforts of improvement. The layout and configuration of the facility is on a relatively flat grade, decreasing the severity of the risks associated with visibility issues and parking break failures on ramps and resulting traffic accidents. In addition, the use of a vertically-shallow bay for the waste compactor (around four feet as shown in **Exhibit 14**) was an efficient design choice which likely reduced earth moving costs during the facility construction. Town staff continually collect and analyze data in pursuit of program improvements.

Exhibit 12. Town of Manchester Facility Household Waste Acceptance System



Exhibit 13. Town of Manchester Facility Unit Weighing System Interface

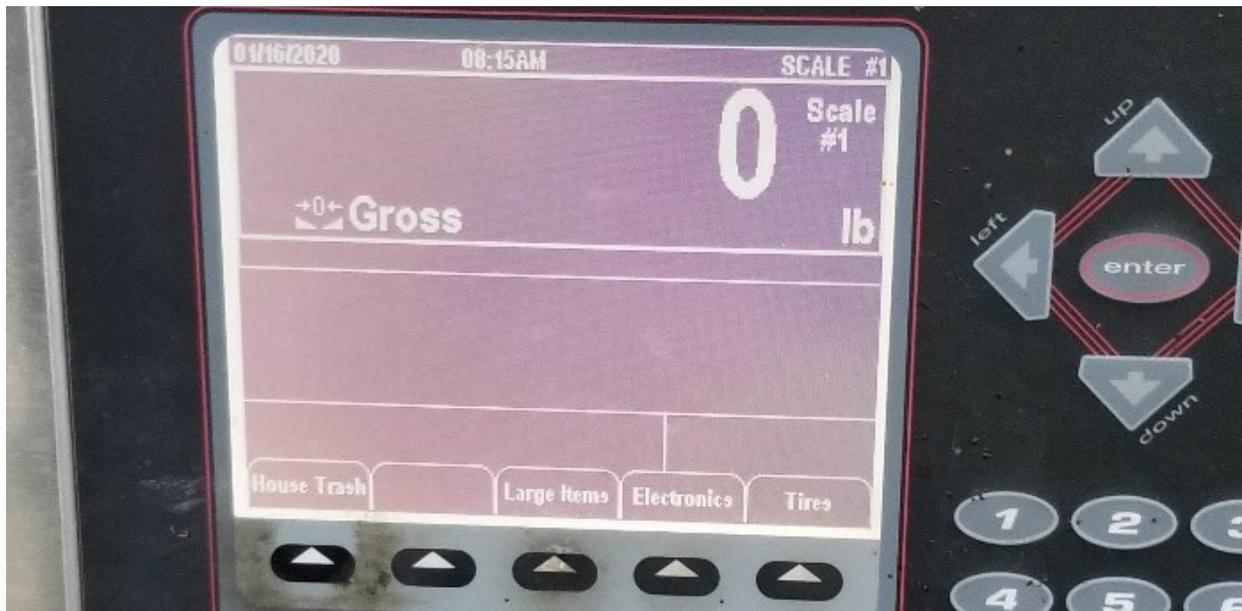


Exhibit 14. Town of Manchester Facility Shallow Compactor Bay



## Weaknesses

- **Yard Waste Management:** Due to space constraints, the facility transfers yard waste to off-site facilities for processing. This is inefficient from a materials handling perspective. Although it is unclear to what extent compost product is made available to citizens or municipal departments at this time, this arrangement may impact the ability to return

compost or finished mulch product for use by citizens or in municipal operations, which would encourage sustainable, circular materials management practices while reducing costs to the Town.

- **Utilization/Operating Hours:** The facility is open three days per week for a total of 13 hours. Despite the success of the system and an estimated participation rate of 23% of Town households, it is assumed the limited operating hours on Mondays and Wednesdays limits participation by many potential users. The limited operating hours may also contribute to occasional traffic backups. Existing traffic backups also appear to be an issue because the drive-through building portion of the facility was originally designed to accommodate two lanes of traffic, but is currently being operated with only one lane of traffic.
- **Other:** It does not appear that the facility followed proper procedures for accounting of costs during the renovation of the facility. Specifically, the facility was issued a negative Report of Examination by the NYS Division of Local Government and School Accountability.

## Site #10: Seneca

The Seneca transfer facility is a unique case in that it does not retain the typical responsibilities associated with owners of other municipal transfer facilities in the County due to the OML agreement with Casella. **Under the current arrangement, the no-cost relatively high level of service currently being provided at the Town of Seneca Transfer facility is more than adequate; it is an excellent deal for the municipality and its residents.** Uncertainties surround the future of the OML Agreement and the Landfill in general, however. Therefore, the assessment that follows is based on current operations, assuming the Town regains the normal ownership responsibilities it had prior to 2003. SCS did assume break-even user fees/unit pricing for cost aspects of the assessment, as appears to have been the case prior to contracting out operations in 2003.

The Town's capability and willingness to work cooperatively, both with the County and its contractor, provides a good basis for potential future relationship building and operational synergies that could potentially enhance services or reduce cost to residents. The Town has piggybacked off the OML Agreement for the County Landfill in a way that benefits Town citizens, as presently they have no costs associated with their transfer facility.

### Strengths

- **Utilization/Operating Hours:** The facility is open three days a week for a total of 30 hours, the most of almost all the municipal transfer facilities in the County. In addition, the Town's program has an excellent estimated participation rate of 60% of Town households, the second highest in the County and the highest for transfer facilities without shared programs. SCS suspects that the operating days and hours is adequate for Town resident participation.
- **Other:** Overall the facility practices good methods of material collections and accepts a wide range of materials in pursuit of waste diversion. Recent planning efforts, such as the contractor's purchase of compactors at the request of the Town, indicate foresight and willingness to display continuous efforts of improvement. The Town makes efficient use of space, and by operating on an old landfill it has turned a liability into an asset for its citizens.

Exhibit 15. Seneca Transfer Facility with Ontario County Landfill in Background



## Weaknesses

- **Location and Site Configuration:** Due to its separate location, highway department personnel and equipment used for maintenance of site infrastructure and management of stored on-site materials must be independently mobilize to the site, consuming municipal resources (note this doesn't appear to be an issue since the site has been operated by a private contractor that is contractually required to maintain the site).
- **Yard Waste Management:** Due to space constraints, the facility transfers yard waste to off-site facilities for processing. This is inefficient from a materials handling perspective. Although it is unclear to what extent compost product is made available to citizens or municipal departments at this time, this arrangement may impact the ability to return compost or finished mulch product for use by citizens or in municipal operations, which would encourage sustainable, circular materials management practices while reducing costs to the Town.
- **Compaction:** The site does not use compactors for the collection of household waste or traditional recyclable material collection (although it appears to have uninstalled units available stored on-site). This collection format increases the efficiency of the operation by reducing turnaround times, increasing transportation efficiencies, and reducing time spent at the Landfill waiting to unload containers for disposal.
- **System User Fees & Net Costs:** It is unclear what the financials of Casella's activities are, and under the agreement with the Town, use of the transfer facility is free to Town of Seneca

residents. Given this, it is unlikely that operational revenues at the site are at least break-even with operational costs, especially when capital costs are taken into account. It is unclear who would operate the transfer facility after the Casella lease and OML Agreement expires in 2028 or if an operation on the site would remain economically viable for the Town.

- **Waste Reduction and Diversion:** Per State of New York regulations, registered transfer facilities must allow for the collection of source-separated recyclables at the facility. The facility meets this requirement, but it has a high waste collection rate as well as the second lowest estimated recycling rates. The program experiences the second highest estimated per capita waste collection rate of all the transfer facilities for which there was such information available, with an estimated 2.2 tons of waste collected per user of the program. In addition, the program has the lowest estimated recycling rate of all the transfer facilities for which there was such information available, calculated at 11% (note this does not include any recyclables other than Zero Sort).
- **Service Lines:** Residents must travel to an alternative facility for e-waste discard or tire disposal. The nearest facility available for Town residents to use for these services represent either a 19 minute one-way drive to Manchester and the resident would need to create an account with Manchester with a minimum, non refundable deposit of \$30.
- **Program Risk:** Significant programmatic risk is evident at this facility. Without the current contracted facility operator, it is unclear how long-term continuity of operations would be achieved at a reasonable cost to residents or even if there is an alternative service provider that would be an acceptable replacement.
- **Other:** The site is relatively small and its layout is not conducive to traffic flow. This may result in crowding and tight, non-deal operations during peak use by residents. In addition, because the transfer facility is located partially on top of a closed municipal landfill, it appears to have settled somewhat differentially and may continue to do so. This requires special attention to the condition of the asphalt paving and particularly the site's buildings and retaining walls ("Z-Walls") around the edge of the collections area. Finally, the unlimited, no-cost nature of the transfer facility's current disposal program is not very conducive to waste reduction and recycling/diversion, and based on the high estimated per household waste disposal rate as compared to those at other transfer facilities in the County, SCS suspects that a notable quantity of non-residential material is being collected at the site.

## Site # 11: South Bristol

Recyclable material quantities managed at this facility were not made available to SCS. Therefore, unit metrics for Town of South Bristol are incomplete, and the lack of data is reflected in the assessment below. Note also that the estimated user figure was a very rough approximation by Town staff.

The Town's capability and willingness to work cooperatively, both with the County and other municipalities, provides a good basis for potential future relationship building and operational synergies that could potentially enhance services or reduce cost to residents. The Town works closely with its stakeholders to improve many aspects of the transfer facility programming. It has invested in protective kiosks for information regarding site education and outreach as well as community events, reflecting a commitment to sustainable operations and a high level of service provision by the Town.

## Strengths

- **Compaction:** The site does use a compactor for the collection of household waste and cardboard baling. This collection format increases the efficiency of the operation by reducing turnaround times, increasing transportation efficiencies, and reducing time spent at the Landfill waiting to unload containers for disposal. Note that the Town does not use a compactor for collection and consolidation of traditional recyclables; the source-separated, multi-stream recyclables collection format is not especially conducive to compactor collection regardless.
- **Utilization/Operating Hours:** The facility is open two days a week (three seasonally) for a total of 12 hours (16 seasonally). In addition, the Town's program has an excellent estimated participation rate of 47% of Town households, the third highest for transfer facilities in the County without shared programs.
- **Service Lines:** A wide variety of materials are accepted at the Town's facility, a range rivaled by only a few other municipalities in the County. However, residents must travel to an alternative facility for proper tire discard, the nearest of which is Manchester (or perhaps out-of-County). This represents a 33 minute one-way drive and the resident would need to create an account with the Town with a minimum, non refundable deposit of \$30. Tires were observed to be stockpiled, presumably from Town highway operations.
- **Other:** The transfer facility has two separated areas and buildings for recycling and household waste collections, respectively (although the former area also houses bulky waste and the latter cardboard acceptance/baling), with different attendants operating each section of the facility. This configuration of keeping the two distinct service lines separate may be a good model for future facility redevelopment (or new facility development) within the County.

Exhibit 16. South Bristol Transfer Facility Waste Compactor Building



## Weaknesses

- **Location and Site Configuration:** Due to its separate location, highway department personnel and equipment used for maintenance of site infrastructure and management of stored on-site materials must be independently mobilize to the site, consuming municipal resources (note that even within the site, the distance from the pile storage area up the hill from the transfer facility buildings is significant).
- **Yard Waste Management:** The practice of transferring accepted yard waste from the transfer facility to a distant area (the old municipal landfill located about 200 yards uphill from the main collections area) increases inefficiencies from excessive handling and transfer of lightweight material. In addition, returning compost or finished mulch product to citizens or for use in municipal operations would encourages sustainable, circular materials management practices while reducing costs to the Town; it is unclear to what extent this is performed at this time.
- **System User Fees & Net Costs:** Operational revenues to the Town do not appear to break-even with operational cost. Note that potentially unallocated costs from other municipal departments or municipalities may not be accounted for in this assessment and that major capital costs, such as the potential costs of fixing the recycling building or replacing the household waste compactor in the future, will likely need to be heavily subsidized by general funding or other sources unrelated to transfer facility operations.

- **Municipal Tax Base:** The lack of break-even operational (let alone potential capital) costs and subsequent general fund transfers due to a lack of adequate user fees could be perceived as unfair by certain residents who do not participate in the program (although the Town's high estimate program participation rate negates this somewhat).
- **Other:** The Town appears to need to complete deferred maintenance at the transfer facility. In addition, during the Site visits SCS observed inherent flaws in its building's design. Specifically, the slab for the recycling building's foundation was not poured to be flat, and this has resulted in damage to its bay doors and an inability for them to close correctly. In addition, the compactor used for household waste collection and transfer was likely the oldest of any observed in the County by SCS and was reported by Town personnel as having major technical issues. In addition, the platform from which residents or site attendants toss bagged garbage into the compactor was seemingly in need of improvement. SCS observed it was somewhat difficult for waste accidentally thrown outside the compactor's hopper from the collection platform to be easily and safely recovered.

## Site # 12: Town of Victor

The Town's capability and willingness to work cooperatively, both with the County and another municipality, provides a good basis for potential future relationship-building and operational synergies that could potentially enhance services and/or reduce costs to residents. The Town is also working to improve many aspects of the facility programming, education and outreach, reflecting a commitment to sustainable operations and provision of a high level of service.

### Strengths

- **Location and Site Configuration:** Due to its relative centrality and co-location with highway and other town department infrastructure, personnel and equipment are shared for maintenance of site infrastructure and management of materials stored on-site. This was observed during our site visit when a highway department employee used a front-end loader (owned by the highway department) to manage material. Town activities associated with waste transfer appear to have adequate space away from highway operations such that there are few negative interferences and many positive synergies from the arrangement. However, residential traffic during Town collection times sometimes interfere with overall municipal complex operations, which has resulted in the Town discussing development of an alternative facility.
- **Compaction:** The facility uses compactors for MSW as well as traditional recyclable material. This format increases operational efficiency by reducing turnaround times, increasing transportation efficiencies, and reducing time spent at the Landfill waiting to unload containers for disposal. It is unclear why the Town has four compactor units for recycling (four times as many as any other solid waste facility in the County) when it appears that having just one for each material stream would suffice.
- **Utilization/Operating Hours:** The facility is open four days per week, for a total of 30.5 hours (34 hours in the winter), which is the most of any of the County municipal facilities.
- **Waste Reduction and Diversion:** In accordance with NYSDEC regulations, registered facilities must allow for the collection of source-separated recyclables at the facility. The facility meets this requirement and appears to encourage increased waste reduction and diversion by residents. The program results in a relatively low per capita waste collection rate of 0.7 tons

per user in comparison to the other County municipal facilities for which information was available, and has a relatively high recycling rate estimated at 28%.

- **Service Lines:** A wide range of materials are accepted at the facility. Victor's program collects several materials only accepted by a few other facilities (see **Exhibit 13** and **Exhibit 14**). All materials collected by County municipal facilities are also accepted at this facility, with the exception of e-waste. Still, the most commonly-used e-waste disposal vendor is located within the Town and collects e-waste directly from Victor residents, eliminating the need for the Town to perform such collection.
- **Other:** Overall, the facility practices good methods of material collection and accepts a wide range of materials in pursuit of high waste diversion. Recent planning and advertising efforts indicate foresight and willingness to pursue continued improvement. The exploration for potential new location or expansion of the facility may provide returns in the future as the Town continues to experience a high growth rate relative to other County areas. However, the Town has not taken significant steps to implement the facility relocation or expansion. Town staff continually collect and analyze data in pursuit of program improvements. There is also considerable signage and other facility infrastructure in place to facilitate convenience and safe use of the facility by residents (see **Exhibit 19**).

Exhibit 17. Town of Victor Residential Waste Oil and Ashes Collections



Exhibit 18. Town of Victor Source-Separated Scrap Metal Collections with Locking Lid



Exhibit 19. Town of Victor Entrance Sign Board and Internal Prominent Signage



## Weaknesses

- **Yard Waste Management:** The practice of transferring yard waste from the facility to off-site facilities is necessary due to lack of space but results in inefficiencies from excessive handling and transfer.

- **System User Fees and Net Costs:** User fees from the facility do not appear to cover operational costs. Unallocated costs from other municipal departments or municipalities may not be included in this assessment, and major capital costs appear to be heavily subsidized by general funding or other sources unrelated to facility operations.
- **Municipal Tax Base:** The lack of adequate user fees and resulting insufficient revenue creates a reliance on general fund transfers to operate the facility. This situation could be perceived as unfair by residents who do not participate in the program.
- **Other:** Concerns of facility use soon exceeding capacity appear legitimate, as the Town has experienced the highest growth rate over the past decade of any County town or city. The Town has considered facility relocation due to anticipated overcrowding and related site traffic, especially if highway department infrastructure located at the Town complex requires expansion into current facility waste collection areas.

## Site # 14: Village of Phelps

The Village of Phelps facility was classified as **Few Issues: Effective Facility.**

The Village's capability and willingness to work cooperatively, both with the County and another municipality, provides a good basis for future relationship-building opportunities and operational synergies that could potentially enhance services and/or reduce costs to residents. The Town has also worked with a local business to implement a custom, weight-based unit pricing system that reflects a commitment to financially sustainable operations, incentivizing waste reduction and diversion, and an overall provision of a high level of service.

### Strengths

- **Compaction:** The facility uses compactors for MSW as well as traditional recyclable materials. This format increases operational efficiency by reducing turnaround times, increasing transportation efficiencies, and reducing time spent at the Landfill waiting to unload containers for disposal.
- **Yard Waste Management:** The practice of stockpiling and managing yard waste on-site reduces inefficiencies from excessive yard waste handling and transfer. Returning compost or finished mulch product to citizens or for use in municipal operations encourages sustainable, circular materials management practices while reducing costs to the Village. Still, there is some uncertainty regarding the future cost of this service, as the Village recently rejected its only bid for yard waste mulching and grinding from a local contractor because the proposed cost was too high.
- **System User Fees and Net Costs:** Operational revenues to the Village appear to exceed operational costs year over year, although Village personnel do not report a reserve fund for contingencies or capital improvements. There may be unallocated costs from other municipal departments or municipalities not included in this assessment.
- **Utilization/Operating Hours:** The facility is open two days per week for a total of 15.5 hours. In addition, the program has a high estimated participation rate at about 34% of Village households. It is concluded the current operating days and hours are adequate for Village resident participation in the program.
- **Waste Reduction and Diversion:** In accordance with NYSDEC regulations, registered facilities must allow for the collection of source-separated recyclables at the facility. The facility appears to meet this requirement and encourages waste reduction and diversion via a unit

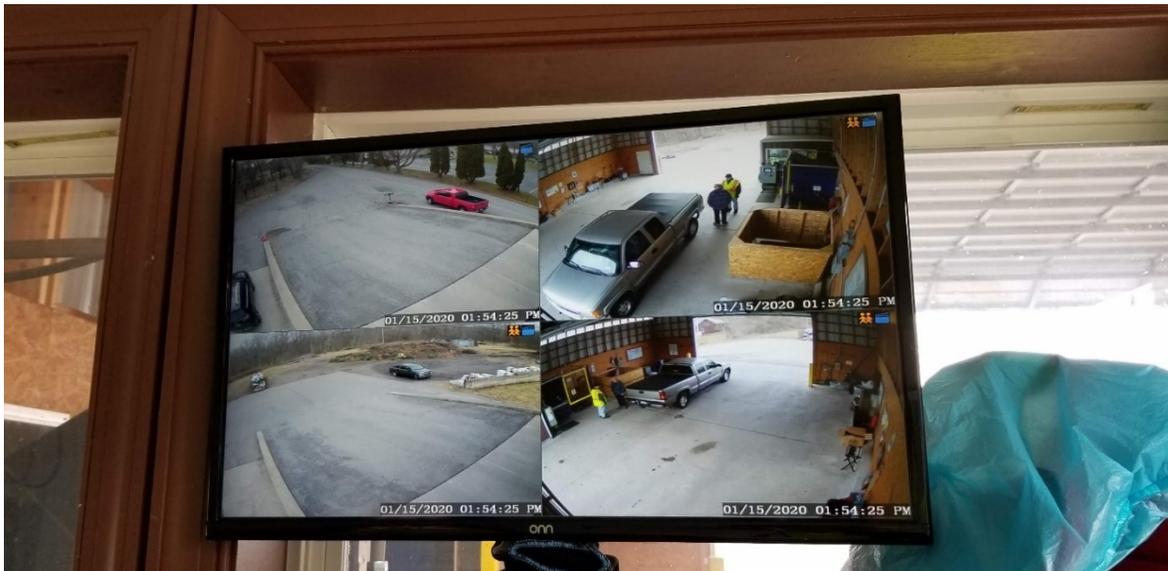
pricing system. The program results in the third lowest estimated per capita waste collection of the County municipal facilities for which information is available, with an estimated 0.26 tons of waste collected per user of the program. In addition, the program has an estimated recycling rate of 47% (excluding yard waste), the highest of the County municipal facilities.

- **Unit Costs:** The program operations appear to be cost-efficient. The program has the second lowest estimated net cost per user of the County municipal facilities for which information is available, with an estimated net cost to the Village of -\$2 per user (i.e., \$2 of net income per user is generated on average after revenues and expenses). The program has a comparatively high cost per ton of waste collected (\$279 per ton), the second highest of the County municipal facilities for which information was available. This may be in part due to the low rate of waste generation per user. However, in part as a result, the facility also has high revenue per ton of waste at \$286, the second highest of the County municipal facilities for which information was available.
- **Municipal Tax Base:** The Village and its shared programs benefit from the facility's operational self-sufficiency. Since the facility appears to break even when operational costs and reserves funding are taken into account, residents would likely consider the facility financing fair because the users who benefit from it also pay for it. Thus, it does not place an undue cost burden on Village residents who do not participate in the program
- **Other:** Recent facility redevelopment efforts indicate foresight and willingness to continually seek improvement. An example is the construction of compactor container pads with embedded metal plates (see **Exhibit 20**) for prolonged longevity and ease of servicing the containers. Village staff continually collect and analyze data in pursuit of facility security, including video monitoring (see **Exhibit 21**). The use of the both lanes for the drive-through portion of the facility prevents traffic backups.

Exhibit 20. Village of Phelps Embedded Metal Plates in Concrete Container Pad



## Exhibit 21. Village of Phelps Video Surveillance/Monitoring System



### Weaknesses

- **Location and Site Configuration:** The facility is located separately from other Village and Town functions, and therefore highway department personnel and equipment used for maintenance of site infrastructure and management of materials stored on-site must mobilize to the site, increasing operational inefficiency.
- **Program Risk:** The narrow, two-lane drive-through area. An attendant was recently injured while performing their normal duties, which may have been associated with the space limitation.
- **Service Lines:** Residents must travel to the Manchester facility for disposal of e-waste, waste tires, and bulky waste not disposed at routine events. This is a 10-minute one-way drive, and the resident would also need to create an account with Manchester, requiring a minimum, non-refundable deposit of \$30.
- **Other:** The facility mixes collected woody yard debris with compostable materials, such as leaves and grass clippings. We recommend the facility keep these materials segregated to reduce contractor fees during future material processing efforts. Additionally, leaves bagged in plastic (therefore making the material non-biodegradable) collected by the Village were observed to be stored at the facility; the Village should require all residents to use paper bags for curbside leaf containerization.

## 3.3 CONSOLIDATED FACILITY SELECTION

### Facility Attributes

**Table 11** below summarizes our analysis of facility attributes based on information in Section 3.2 above and Appendix E, and includes strengths and weaknesses for each facility. This summary is based on our research, site visit observations, and analyses of various metrics.

Table 11. Summary Matrix of Solid Waste Facility Attributes

Facility	Good Location and Site Configuration	Good Compaction	Good Yard Waste Management	System User Fees and Net Costs	Good Utilization/ Operating Hours	Good Waste Reduction and Diversion	Unit Costs	Low Program Risk	Service Lines	Municipal Tax Base
Bristol	x	✓	✓	x	x	x	x	x	x	x
Canandaigua	✓	✓	✓	x	✓	x	x		✓	x
Farmington	x		✓	x	✓				x	x
Geneva	x	✓	x	x	✓	✓			x	x
Gorham	✓	x		x	✓				✓	x
Hopewell	x	✓	x	x	x	✓	x	x	✓	x
Manchester	✓	✓	x	✓	x	✓	✓		✓	✓
Naples	x	x		x	x			x	✓	x
Richmond	x	✓	✓	x	x			x	x	x
Seneca	x	x	x	x	✓	x		x	x	
South Bristol	x	✓		x	✓				✓	x
Victor	✓	✓	x	x	✓	✓			✓	x
West Bloomfield	✓	x	✓	x	x	x	x	x	x	x
Village of Phelps	x	✓	✓	✓	✓	✓	✓	x	x	✓

## Yard Waste Facilities

The current yard waste collections and mulch processing arrangements at the majority of the facilities (including on-site processing once per year) currently appear to be working well due to the presence and partnership of a large-scale organics recycler in Manchester. However, consolidated, dedicated yard waste drop-off locations would be a critical component of a County-wide Hub-and-Spoke resource recovery facility model to replace the existing municipal-based solid waste facility system. For example, the Town of Manchester facility does not have sufficient area for its own yard waste storage, nor for storage and processing of yard waste from multiple jurisdictions. As such, we recommend that the Village of Phelps yard waste facility would be appropriate for mulch processing for residents of the Northeast quadrant.

Consolidating mulch processing would accomplish some economies of scale and reduce the number of independent contracts and subsequent contractor mobilizations that is currently required for yard waste processing at the existing facilities. The County could internalize the operation and perform the task itself on an as-needed basis by purchasing a mobile tub grinder or other shredding/grinding equipment (as well as the equipment needed for its transport). Yard waste collection and mulch processing facilities could be co-located with limited composting operations for suitable materials to reduce material handling costs.

## Composting

Composting of food scraps and kitchen waste is a growing practice based on cultural and environmental trends. Political actions in New York State have also accelerated source separation and special handling requirements for this material. This will be especially important for commercial and institutional generators when enforcement of the Food Recovery and Recycling Act begins in June 2020. The County should consider developing its own composting accommodations to guarantee an end-use facility for compostable materials within the County.

Food waste composting infrastructure could be developed at each of the yard waste facilities. Compostable materials could include yard waste, food scraps/kitchen waste, wastewater treatment plant biosolids (currently landfilled and a known source of odors), shredded paper, and low grade mixed papers that otherwise cannot be effectively recycled. Odors could be managed by operating compost systems as covered aerated static piles, using a Gore system as cover. This system has been used successfully in populated areas (including Queens, New York) to maintain careful odor control and compost significant volumes of food and yard waste.

## Plans for Future Modifications

The considerations used to distinguish facilities and programs for inclusion in future planning included whether the facilities were well-maintained and updated, and the degree of future program planning. One common issue in interviews with municipal personnel is that many were reluctant to make program or facility changes until the results of this Study were published. **Table 12 below** summarizes our observations.

Table 12. Facility and Program Planning

Site No.	Facility	Facility/Planning Notes
1	Bristol	N/A
2	Canandaigua	Recent building redevelopment/expansion. Purchase of nearby land for expansion (7.3 acres). Performed marketing/education study.
3	Farmington	Large space availability (21.2 acres) for development of future facility; development on a former closed landfill presents some constraints.
4	Geneva	Working with City and private contractor to develop new yard waste facility, including formal composting. Considering wash station for food waste buckets.
5	Gorham	Purchase and retention of nearby land for expansion (53 acres). Soil stockpiling for future facility grading. Education efforts for food waste.
6	Hopewell	Redevelopment of website and payment system.
7	Manchester	Recent building redevelopment/expansion.
8	Naples	Recent use of County grant funds to improve yard waste management facility with grading of an elevated area to facilitate easier loading.
9	Richmond	Recent use of County grant funds to improve facility acceptance of bulky waste and C&D debris with pavilion installation.
10	Seneca	Purchase and future installation of compactors for MSW and recyclables.
11	South Bristol	Recent purchase of skidsteer for facility maintenance and highway department use.
12	Victor	Discussions for facility future – e.g., how to incorporate new facility and highway department expansions into Town’s master planning efforts; concept phase only.
13	West Bloomfield	Considering designation of portion of recently purchased Town Hall property for future replacement facility; concept phase only.
14	Village of Phelps	Recent adoption of unit pricing and weigh system used by Manchester.

## Consolidated Facilities Selection

Based on the information in Table 11, Table 12 and Sections 3.1 and 3.2 above, we recommend that the Hub-and-Spoke model for the County include the following consolidated facilities:

- Southwest: South Bristol
- Northwest: Victor (for solid waste) and Farmington (for yard waste)
- Central Hub: Canandaigua
- Northeast: Manchester (for solid waste) and Phelps (for yard waste)
- Southeast: Either County Landfill/Seneca or Gorham

### 3.4 CONSOLIDATED FACILITIES IMPACTS ANALYSIS

**Table 13** below summarizes the potential facility consolidations under a “hub-and-spoke” model and provides estimated households and users served by each facility.

Table 13. Proposed Municipal Facility Consolidation

Area	Site <sup>1</sup>	Site Consolidations (% is of sum of all Towns)		
		Households	Users	Existing Facilities to Close
Southwest	<b>S. Bristol</b> (SW & YW)	3,704 [11%]	900 [10%]	Naples, Richmond
Northwest	<b>Victor</b> (SW) & <b>Farmington</b> (YW)	11,841 [35%]	2,694 [30%] <sup>3</sup>	Victor (YW), Farmington (SW), West Bloomfield
Central Hub	<b>Canandaigua</b> (SW & YW)	6,691 [20%]	1,367 [15%]	Bristol
Northeast	<b>Manchester</b> (SW) & <b>Phelps</b> (YW)	7,650 [22%]	1,840 [21%] <sup>3</sup>	Manchester (YW), Phelps (SW), Hopewell
Southeast <sup>2</sup>	<b>County Landfill/Seneca or Gorham</b> (SW & YW)	4,153 [12%]	2,064 [23%]	Geneva and either County Landfill/Seneca or Gorham (for SW/YW)
<b>Total:</b>		<b>34,039</b>	<b>8,865</b>	
Average		6,808	1,773	

**Notes:**

1. SW=Solid Waste, YW=Yard Waste

2. Facility household and user quantities are for solid waste facility only, not centralized HHW facility (as described in Section 5.0). Portion of facility accepting HHW or other special materials would need to handle significantly more users during HHW/special waste collection events.

3. Facility % user increases over current for Northwest and Northeast are expressed as average increases for solid waste and yard waste facilities; no separate solid/yard waste usage data was available at each facility.

Table 14 below summarizes estimated solid waste/recyclable material tonnage and user throughput impacts on the consolidated facilities, as a result of closing other existing facilities.

Table 14. Estimated Consolidated Facility Usage and Tonnage Changes

Area	Site <sup>1</sup>	Facility % Tonnage Increase Over Current <sup>2</sup>	Facility % User Increase Over Current
Southwest	<b>S. Bristol</b>	683% <sup>3</sup>	200%
Northwest	<b>Victor</b>	Unknown <sup>4</sup>	3% <sup>1</sup>
Central Hub	<b>Canandaigua</b>	12%	12%
Northeast	<b>Manchester</b>	142%	5% <sup>1</sup>
Southeast	<b>County Landfill/ Seneca</b>	41% <sup>5</sup>	261%
	<b>Gorham</b>	Unknown <sup>6</sup>	106%

**Notes:**

1. Facility % user increases over current for Northwest and Northeast are expressed as average increases for solid waste and yard waste facilities; no separate solid/yard waste usage data was available at each facility.
2. Tonnage increases are based on total MSW and recyclables only. Yard waste tonnage data was not available. Assume yard waste tonnage will increase at same rate as solid waste tonnage. On this basis, for Northeast and Northwest areas (where we propose separate consolidated solid waste and yard waste facilities), % tonnage increase does not include current tonnage to proposed yard waste facility, as this facility will take yard waste away from solid waste facility.
3. South Bristol facility tonnage increase does not include MSW from Richmond facility, and does not consider existing recyclables tonnage at South Bristol facility.
4. MSW and recyclables tonnage data for West Bloomfield facility (i.e., only facility in Northwest area to be fully closed) was unavailable.
5. County Landfill/Seneca tonnage increase does not include MSW or recyclables from Gorham facility.
6. Could not estimate tonnage % increase at Gorham due to lack of current tonnage data.

The following summarizes practical considerations for the proposed consolidated facilities:

- **Southwest:** The South Bristol facility and closed landfill site has 38 total acres, of which approximately 2 acres is currently developed with solid waste facility infrastructure. There appears to be potential for facility re-design to incorporate additional capacity needed, given that the recycling building needs to be rebuilt and the MSW compactor needs to be replaced. We were unable to observe the yard waste management area, but from aerial photos, it appears to be sufficient to accept yard waste from the three municipalities proposed for the regional partnership, given that they are three of the smallest municipalities in the County. Based on the usage estimates in Table 13 above, this would be the least frequented site, and due to current use by out-of-County residents in this area, current user estimates may be high compared to what they would be if this facility restricted use to southwest County residents. The yard waste site could likely still be used for South Bristol highway operations in conjunction with yard waste-related activities, due to its size.
- **Northwest:** The Town of Victor is considering relocating its facility, which presents an opportunity to design and locate the facility to accommodate additional programs based on a regional partnership. In addition, Farmington’s 21-acre yard waste processing facility could be reconfigured as necessary to accept vegetative waste from a regional partnership. The facility could also potentially accept food scraps in the future.

- **Central:** The Town of Canandaigua is considering relocating its facility to a nearby site, which it owns (7.3 acres, already rough-graded). The potential relocation presents an opportunity to design the facility to accommodate additional programs based on a regional partnership, as well as a special HHW/Multi-Materials Management facility open to all County residents. Access and other controls could be implemented to direct residents based on which service they require.
- **Northeast:** The Town of Manchester operates a successful facility. This facility, with extended hours or distribution of resident area access hours, could potentially also accommodate residents from Phelps and Hopewell, and perhaps even Farmington. There appears to be space located behind the facility for expansion. However, use of this area would require relocating the highway department material stockpiles currently located there.
- **Southeast:** The County Landfill/Town of Seneca location is best located to accept material from the municipalities located in the southeast quadrant, however, significant upgrades would be required for this facility, as discussed in Section 3.2. Also, since operation costs for this facility are covered under agreement with the Landfill contractor, the County may not realize any increased operational costs as a result of increased operations at this facility. The Landfill contractor may even cover some of the facility upgrade costs on their own.

The Town of Gorham is considering relocating its facility to a nearby site, and owns an approximately 53-acre site with construction fill already placed on-site. The potential relocation presents an opportunity to design the facility to accommodate additional programs based on a regional partnership. Preliminary design and cost estimates indicate a replacement facility would cost in the range of \$700,000 to \$850,000, which includes the required fill material already located on-site.

At this stage, we have insufficient information to recommend whether upgrade of the Seneca facility or relocation of the Gorham facility would be more feasible.

To evaluate the economic impacts of the facility consolidations, Table 15 below summarizes estimated capital costs needed to upgrade the consolidated facilities prior to consolidation of operations, and impacts on annual operating costs at all facilities. Table 15 also provides a total estimated capital cost for all facility consolidations, and an estimated total net operating cost change resulting from the consolidations. Further details regarding development of these estimated capital and operating costs are included in Appendix F.

Table 15. Estimated Consolidated Facility Cost Impacts

Area	Site <sup>1</sup>	Facility Consolidation Capital Cost	Facility Annual Operating Cost Change <sup>1,2</sup>
Southwest	South Bristol (SW&YW) <sup>4</sup>	\$830,000	\$190,000
	Naples	n/a	(\$500)
	Richmond	n/a	(\$7,632)
Northwest	Victor (SW)	\$560,000 <sup>5</sup>	\$12,000

Area	Site <sup>1</sup>	Facility Consolidation Capital Cost	Facility Annual Operating Cost Change <sup>1,2</sup>
	West Bloomfield	n/a	(\$11,810)
	Farmington (YW)	\$120,000	\$800
Central	Canandaigua (SW&YW)	\$1,260,000 <sup>6</sup>	\$27,000
	Bristol	n/a	(\$8,857)
Northeast	Manchester (SW) <sup>7</sup>	\$340,000	\$112,000
	Hopewell	n/a	(\$21,250)
	Phelps (YW)	\$0	\$52,000
Southeast <sup>3</sup>	Gorham	n/a	(\$149,214)
	Geneva	n/a	(\$54,904)
	Seneca (SW&YW)	n/a	Unknown <sup>8</sup>
<b>Total Consolidation Capital Cost and Net Operating Cost Change:</b>		<b>\$3,100,000</b>	<b>\$140,000</b>

**Notes:**

1. Annual operating cost changes at consolidated facilities based on 2016-2019 average operating costs from Table 7, multiplied by average of estimated facility % tonnage and user increases from Table 14. Annual operating cost changes at facilities to be closed based on 2016-2019 average operating costs from Table 7, and that all such costs would be saved due to facility closure.
2. Several facilities, particularly those recommended to be closed, did not disclose all operating costs, including unallocated costs covered by other departments, general funding or other sources unrelated to facility operations. As such, the estimated total operating cost change shown is expected to be higher than actual.
3. Assumes that the Gorham facility is closed in favor of expanded operations at the County Landfill/Town of Seneca. The County does not realize operational costs for the Seneca facility, which is operated under contract by the Landfill contractor.
4. Assumes improvements are made to existing facility with a staggered schedule for consolidated facility operation, to minimize traffic impacts on the consolidated facility.
5. Assumes improvements are made to existing highway facility (no development on recently-procured nearby greenfield property).
6. Assumes reuse of equipment from existing facility at new consolidated facility to be developed at recently-procured adjacent greenfield property.
7. Assumes reuse of solid waste equipment from Phelps facility for new consolidated solid waste facility at Manchester.
8. Data including current facility operating costs were not able to be obtained from current site operator, Casella Waste Services.

In addition to costs realized by the County and municipalities as described above, the proposed consolidations will have direct impacts on County constituents in terms of increased travel times/distances to the consolidated facilities. Table 16 below summarizes these impacts.

Table 16. Estimated Constituent Facility Travel Impacts

Region/Facility Name	Round-Trip Distance Increase (miles) <sup>1</sup>	Round-Trip Time Impact (minutes) <sup>2</sup>	Cost Impacts	
			Per Round-Trip <sup>3</sup>	Per User, Per Year <sup>4</sup>

Region/Facility Name	Round-Trip Distance Increase (miles) <sup>1</sup>	Round-Trip Time Impact (minutes) <sup>2</sup>	Cost Impacts	
			Per Round-Trip <sup>3</sup>	Per User, Per Year <sup>4</sup>
<b>Southwest</b>				
South Bristol (SW&YW)	0	0	\$0	\$0
Naples	3.2	6	\$1.8	\$94
Richmond	4.7	9	\$2.7	\$140
<b>Northwest</b>				
Victor (SW)	0	0	\$0	\$0
West Bloomfield	15	30	\$8.6	\$447
Farmington (YW)	2.8	6	\$1.6	\$83
<b>Central</b>				
Canandaigua (SW&YW)	0	0	\$0	\$0
Bristol	6.8	14	\$3.9	\$203
<b>Northeast</b>				
Manchester (SW)	0	0	\$0	\$0
Hopewell	7.6	15	\$4.4	\$229
Phelps (YW)	11.6	23	\$6.7	\$348
<b>Southeast</b>				
Gorham	12.2	24	\$7.0	\$364
Geneva	5.6	11	\$3.2	\$166
Seneca (SW&YW) <sup>5</sup>	0	0	\$0	\$0

**Notes:**

1. Round-Trip Distance Increase based on estimated average increased distance from current municipal center to existing solid waste facility, and to consolidated solid waste facility.
2. Assumes average speed of 30 mph.
3. Based on 2020 IRS mileage rate of \$0.575/mile.
4. Assumes 52 trips per year by number of users indicated in Table 10.
5. Assumes solid and yard waste collection in Southeast region is consolidated to Seneca facility, and that Gorham facility is closed.

While the costs indicated in Table 15 and Table 16 above are significant, the facility consolidations would improve and standardize the quality of service provided at the facilities. As indicated above, we also expect that the actual operating cost increases resulting from consolidation as indicated in Table 15 are over-estimated, and would actually be lower, and could even result in annual operation cost savings over time. These costs could be managed if the County were to assume control over these facilities, and spread the capital and operating costs evenly across the County population. This could be done via a variety of cost recovery structures, such as tax assessment or usage costs (e.g. pay-as-you-throw). If solid waste management is maintained in the control of the individual municipalities, agreements would need to be made between the municipalities in each region so that facility costs are fairly spread amongst the served constituents. The cost estimates developed in this report are conceptual in nature, and should be refined through more detailed study before proceeding with the proposed facility consolidations.

In any case, many constituents would need to drive further to the facilities, which, as shown above, results in a significant cost to them. The County would need to justify whether the service quality improvements justify the additional constituent travel expenses. Even considering the additional travel required, we believe that the facility consolidations would increase solid waste program participation and reduce illegal dumping. Providing full service at each facility (i.e., one-stop-shop), with sufficient capacity to manage traffic accumulation, will provide additional incentive for constituents to utilize the facilities, because they will not need to drive to multiple locations to dispose of their typical refuse (HHW and special wastes are treated separately, and described in Sections 4.0 and 5.0).

## 4.0 COLLECTION EVENTS

County and municipal special waste collection events provide an opportunity for residents to discard certain materials. Such events include two categories of materials: 1) materials not normally accepted at facilities, but accepted at other municipal programs within the County; and 2) materials only accepted at special County collection events, such as HHW.

### 4.1 MUNICIPAL EVENTS

Some of the facilities conduct special collection events which are scheduled throughout the year. These events are generally hosted at the facility. They include:

- **Farmington Spring/Fall Cleanups:** Bulky waste, C&D debris, e-waste, and waste tires are accepted at semi-annual events at the Town of Farmington facility. In 2018, over 100 tons of such materials and 60 waste tires were collected from event participants.
- **Geneva:** The Town of Geneva hosts multiple special events including the following:
  - Spring Cleanup Days – Items such as clean mattresses, e-waste, and other usable items are donated to area charities at these annual, multi-day events.
  - Senior Citizen Clean-out Day – This is a recently pioneered one-day event. Town staff travelled to pre-registered Town senior citizen's houses to accept certain waste materials, including waste and items for donation or recycling.
  - Fix-it Clinics – Semi-annual events hosted in the Town's highway garage in which volunteers repair items such as broken lamps, vacuum cleaners, tools, furniture, and clothes, eliminating the need to dispose of these items. Some of the salvaged goods that result are donated for others to use and some are retained by the original owner.
- **Phelps Large Item Drop-off:** Bulky waste, such as couches, chairs and mattresses, are accepted at quarterly drop-off events at the Village of Phelps facility.

Participation/usage and cost data for these municipal events was not available.

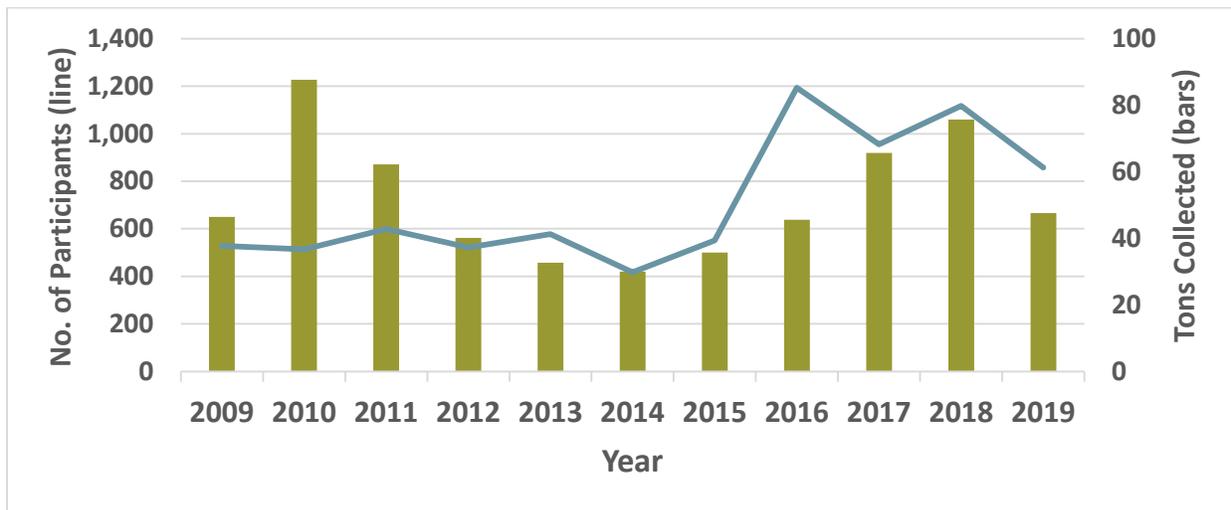
### 4.2 COUNTY EVENTS

County collection events are hosted at various locations, including the Landfill and multiple municipal facilities. These events include collection of HHW and special materials. In 2019, the following events were sponsored by the County:

- **HHW:** The most costly events are for HHW. Forty-eight tons of HHW was collected at a cost of approximately \$150,000. Through cost sharing with Casella and NYSDEC grant, the County ultimately paid about \$37,000 per event.
  - One event in the Spring at the Landfill (393 Participants in 2019)
  - One event in the Fall at Town of Farmington facility (465 Participants)
- **E-Waste:** The largest special materials event; a total of 76 tons was collected.
  - One event in the Spring at the Landfill (517 Participants)
  - One event in the Fall at Town of Bristol facility (514 Participants)

- **Document Destruction/Shredding:** Two events, both at the Landfill, one each in the Spring and Fall.
- **Waste Tires:** No events were held in 2019; two were held in 2018 (one for tires from standard vehicles and one for large vehicles/tractors). These events cost about \$7,000 collectively and collected 21 tons of tires.
- **End of Season Pumpkins:** Three events in November; one each at the Town of Victor and Town of Geneva facilities and one at the Ontario County administration building in City of Canandaigua. The events cost about \$900 each and collect about three tons of pumpkins for vermicomposting by Organix Green Industries, a commercial operation in Seneca Castle.

Exhibit 22. County HHW Collection Event Use Metrics (2009 – 2019)



Note: The County only hosted one collection event per year from 2009 through 2015.

As shown in **Exhibit 22 above**, the total quantity of material collected at the events each year increased from 2014 to 2018, then decreased in 2019. Note a second annual collection event was added in 2015.

**Table 17 below** summarizes recent annual costs to the County for solid waste collection events described above. Costs for municipally-sponsored events were not provided and are not included in Table 17 below.

Table 17. Event Annual Operating Cost Summary

Event	Annual Event Costs (\$/year)			
	2017	2018	2019	Average
HHW	\$32,143	\$51,365	\$74,366	\$52,625
E-Waste	\$42,436	\$22,434 <sup>1</sup>	\$54,788	\$47,863
Paper Shredding <sup>2</sup>	-	-	\$975	\$975
Residential Tires <sup>3</sup>	-	\$7,019	-	\$7,019
Pumpkins	\$177 <sup>4</sup>	\$998	\$894	\$690
<b>Total:</b>	<b>\$65,756</b>	<b>\$81,816</b>	<b>\$131,023</b>	<b>\$109,172</b>

**Notes:**

<sup>1</sup> For 2018 e-waste events, cost information was only available for November event. Average annual cost is weighted based on number of events in each year.

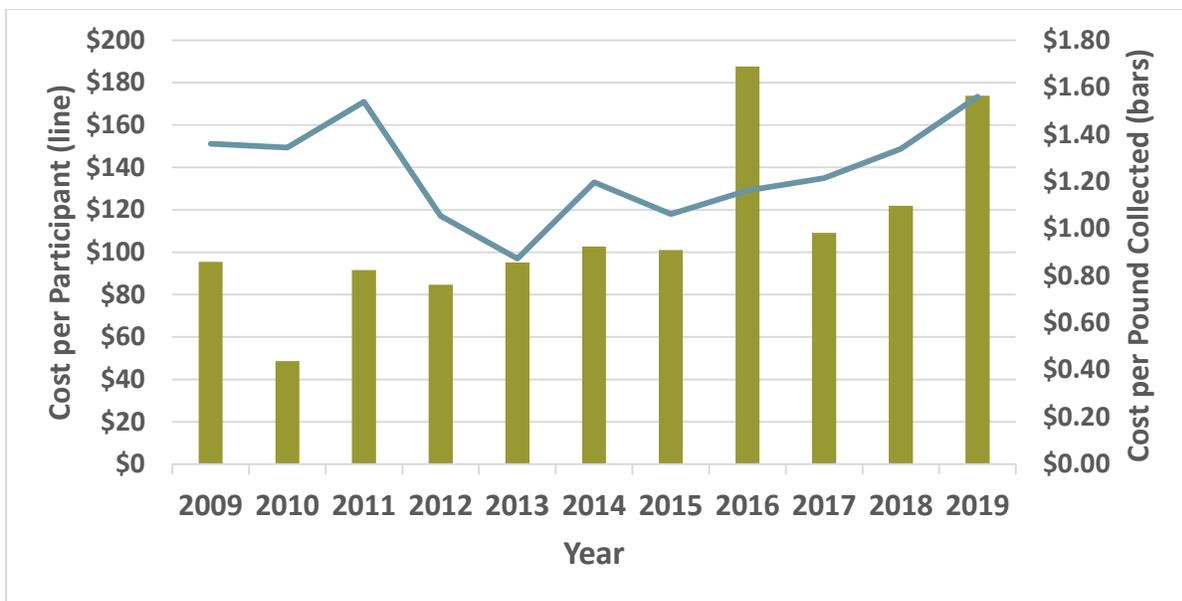
<sup>2</sup> No cost information was provided for 2017 or 2018 paper shredding events. Average annual cost represents only total 2019 cost.

<sup>3</sup> There were no residential tire collection events in 2017 or 2019, though there were two such events in 2018. Average annual cost represents only total 2018 cost.

<sup>4</sup> The 2017 pumpkin collection cost information appears to be outlier, and is therefore excluded from the average annual cost.

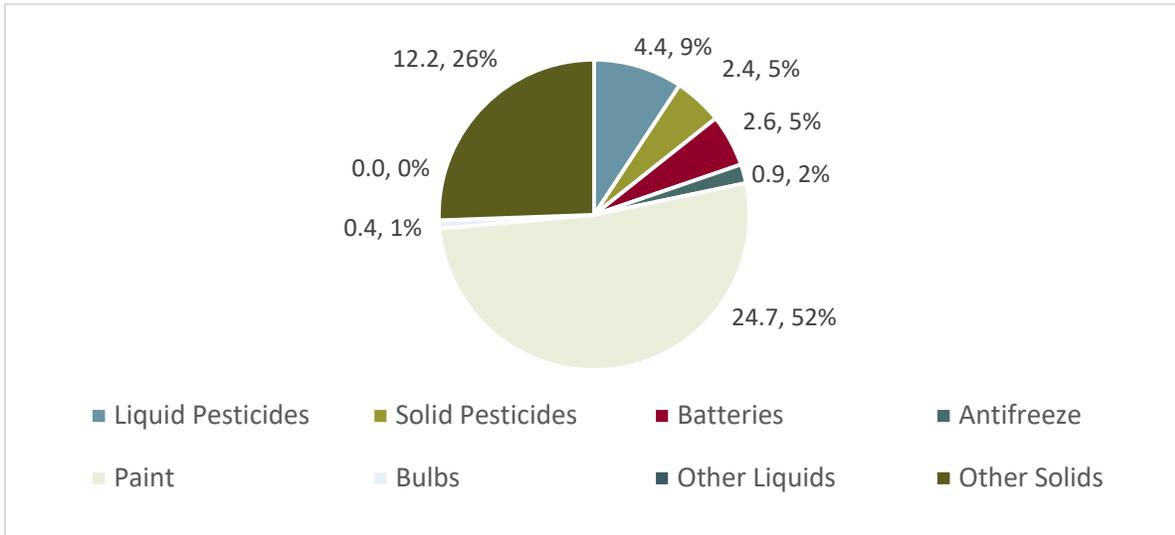
**Exhibit 23 below** shows trends in unit costs for the HHW collection program from 2009 to 2019. The exhibit demonstrates that the total cost per participant has increased each year from 2015 to 2019.

Exhibit 23. County HHW Collection Event Unit Cost Trends (2009 – 2019)



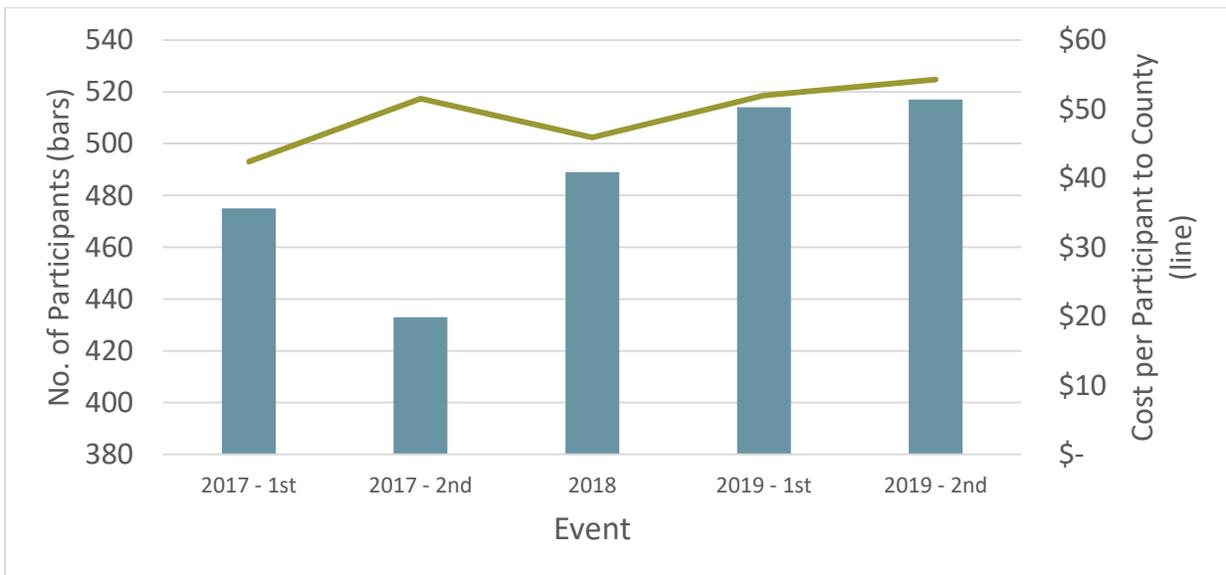
**Exhibit 24 below** summarizes the quantities of specific materials collected at two HHW collection events in 2019.

Exhibit 24. County HHW Collection Event Recovered Materials by Type (Tons)



The total cost of the HHW and other County-sponsored collection events in 2019 was about \$205,000. Of that, the County’s cost share was about \$94,000. The balance was paid by Casella and NYSDEC grants through the New York State Environmental Protection Fund. Trends in event unit costs to the County based on the most recent five collection events are shown in **Exhibit 25 below**. As shown in the exhibit, there are around 500 participants per event and costs to the county are in the range of \$50 to \$60 per participant.

Exhibit 25. County HHW Collection Event Recovered Materials by Type (Tons)



The vast majority of the financial resources used during County collection events are consumed during HHW collection events (and to a lesser extent, e-waste collection events). These events

provide an opportunity for residents to properly dispose of materials that may not be accepted at the City or Town's individual solid waste programs.

The partnership with Casella alleviates half of the total pre-DEC reimbursement costs that would otherwise be borne by the County. Although it is uncertain how the total costs may change at the expiration of the OML Agreement in 2028, the additional costs to the County without the partnership may justify dialing back the frequency of events or moving towards implementing a permanent collection facility.

HHW collection events must be approved by NYDEC prior to their commencement. To supplement regular HHW collection events, or to provide an alternative collection mechanism altogether, a DEC-permitted Permanent HHW Collection and Storage Facility can receive HHW from New York residents on a regular basis. Currently, 17 such facilities are permitted in New York State, with four located in Buffalo, Rochester, Syracuse, and Ithaca. Section 5.0 describes the closest of such facilities to the County's jurisdiction - the Monroe County ecopark in Rochester, and the potential benefits of development of a similar facility in the County.

## 5.0 EVENTS CONSOLIDATION AND CENTRALIZED FACILITY CONSIDERATIONS

The services provided via collection events described in Section 4.0 may be more efficiently provided either through event consolidation and/or via a permanent centralized facility. This section includes:

- A review of a nearby centralized facility, the Monroe County ecopark and a limited review of the Rockland County HHW facility;
- A description and cost-benefit analysis of a potential centralized County facility; and ,
- An analysis of proposed changes to current collection events.

### 5.1 MONROE COUNTY ECOPARK

The County asked us to visit the Monroe County ecopark, and consider this facility for emulation with respect to a similar centralized County facility. The Monroe County ecopark, a public-private partnership with Waste Management, Inc., is a HHW and other materials collections facility developed in 2012 to improve the area's municipal wastewater collection and treatment programs. Since its inception, the facility has expanded its services to include the collection of non-HHW materials (i.e., a "multi-materials" collection facility, sometimes referred to as a resource recovery park), including traditional recyclables and special waste streams not collected elsewhere. The service is provided to residents only, and visits by users of the facility must be scheduled. Monroe County collects the following notable materials at the ecopark:

- **Household Hazardous Waste** – Similar to what is collected at Ontario County HHW collection events, materials accepted at the ecopark include liquid and powder-based HHW generally not accepted in curbside programs, including automotive fluids, cleaners, driveway sealers, flammables, mercury-containing products, insecticides/pesticides, fertilizers, pool/photo chemicals, resins, adhesives, wood stains, preservatives and oil/latex based paints.
- **Light Bulbs** – Select varieties of light bulbs, primarily fluorescent/compact fluorescent types (incandescent types can be disposed with regular household waste) with or without elemental mercury. Long tube varieties are stacked in special canisters for transfer, shown in **Exhibit 26 below**.

**Pharmaceuticals, Sharps and Syringes** – These hazardous materials are collected as a more secure and safe way to discard unused or unwanted medications and other medical necessities such as medical grade sharps. The intent in collecting these materials is to reduce entry of these materials into the wastewater collection and treatment system. Monroe County holds three annual collection events at area grocery stores.

**Waste Cooking Oil** – Waste cooking oils such as spent fryer oil and grease is collected. It is stored in 55-gallon drums on the floor of the facility until it is transferred in bulk and recovered for beneficial use by Baker Commodities of Rochester, NY.

**Expanded Polystyrene (EPS)** – Most commonly called "Styrofoam" (the trade name of the most well-known EPS products) this material comes in both beaded and non-beaded form. Monroe County has

invested in a cold densifier to improve the transportation efficiency of this extremely light, difficult-to-manage material. The densification is labor intensive and requires a large storage space for the EPS until it can be managed. Only clean material from packaging is accepted; packing peanuts and food containers are not accepted. Any material deemed unacceptable by ecopark personnel must be discarded to reduce contamination with densified material for transfer.



Exhibit 26. Special Light Bulb Collections at Monroe County ecopark.

**Bulky Plastic Items** – Also referred to as rigid plastics, bulky plastics include 100% plastic items that are too large for pickup by curbside recycling. It includes items such as plastic bins/tubs, milk crates, plastic lawn furniture, large children’s toys, etc. This material stream has been significantly impacted by recent issues in the recycling market, in part due to the high level of contamination in this stream from other materials such as metals, fabrics, and non-recyclable plastics.

**Documents for Shredding** – Documents containing sensitive information may be deposited for eventual destruction via shredding in secure lock-boxes on-site. The County hosts multiple document shredding events annually. These events may be eliminated or reduced in scope via the implementation of a HHW facility in the future. Regular shredded paper can also be added to collected food waste to improve related compost operations, a potential synergy already being implemented at the municipal solid waste facilities in the County (see **Exhibit 27 below**), although paper material for shredding is not stored on-site as it is at the Monroe County facility.

Exhibit 27. Shredded Paper Collection (Town of Canandaigua Facility)



**Items Also Collected at Ontario County Municipal Facilities** – Electronic waste, rechargeable and button batteries, OCC, scrap metal and appliances/white goods, US flags for retirement, fire extinguishers, clothing, plastic bags and film, printer cartridges, propane tanks, and commingled traditional recyclables are also accepted at the facility.

Recent materials acceptance history at the ecopark facility is summarized in Table 18 below.

Table 18. Monroe County ecopark Material Collection History

Year	Materials Collected (tons) <sup>1</sup>
2012	625
2013	700
2014	675
2015	750
2016	975
2017	900
2018	1,125
2019	975

**Notes:**

<sup>1</sup> Materials include scrap metal, old corrugated cardboard/containers (OCC), bulky plastics, commingled recyclables, documents for shredding, pharmaceuticals, HHW and electronics waste. Quantities are approximated from chart provided by Monroe County.

Other facts regarding the ecopark are summarized as follows, based on information provided by Monroe County:

- Waste accepted at facility by appointment; about 6,400 appointments/year (2019 data).
  - Including mobile events, 7,800 appointments/year in 2019.
- HHW contractor, Clean Harbors. Annually that expense is around \$300,000-\$400,000
  - Manages all HHW materials plus CFL light bulbs.
  - Monroe County receives about \$125,000 in grant funding from NYSDEC for this expense (included in costs above).
- Contract with the City of Rochester to haul some of the recyclables (bulky plastic and mixed recyclables) –about \$25,000/year
- Most other vendors do not charge – examples as follows:
  - Cascades Recovery takes confidential documents for shredding as part of transfer station contract
  - Covanta takes US Flags and pharmaceuticals as part of the Rx4Safety program
- Process (via cold compaction densification) expanded polystyrene (i.e., Styrofoam) for recycling.
  - Currently seeking a buyer for densified product.
  - Purchased cold compaction densifier in 2018 for \$56,000.
- ecopark staffing:
  - Two full-time employees spend most of their time managing the ecopark.
  - Monroe County provides additional staff during collection events, representing an additional 1,200 hours of staff time per year.
  - Depending on time of year, Monroe County staffs collection events with 2-4 workers. About 96-100 collection events per year are conducted at the ecopark.
  - Monroe County Sheriff department must be present during collections for prescription medications, representing about 700 labor hours per year, including time to escort staff to destruction facility.
- Under contract to Monroe County, Waste Management manages the vendors for electronics, cardboard, CFC devices, and waste tires; separate costs for management of these special wastes unavailable.
  - Waste Management provides one worker per collection event for their wastes, and e-waste vendor provides another worker for that waste stream.
- Most ecopark capital expenses were covered by Waste Management during facility commissioning.
  - Utilized an old transfer station and retrofitted it to accommodate the new layout/operations. County spent about \$100,000 on facility upgrade.
  - Additional improvements made later, such as HHW storage units and a new ventilation system; costs for these upgrades unavailable.

## 5.2 ROCKLAND COUNTY HHW FACILITY

Rockland County is located in southern New York State, adjacent to New Jersey and near New York City. The Rockland County HHW facility was constructed by Rockland County in the 1990s at their fireman training center, located in Pomona, New York. The HHW facility is a drop-off collection facility that accepts household hazardous waste materials from Rockland County residents and small businesses that qualify for Conditionally Exempt Small Quantity Generator (CESQG) status. Rockland County residents can drop off household hazardous waste free of charge, during operating hours. The facility is open Monday-Friday from 8AM-1PM (except holidays), as well as some Saturdays and Sundays.

The Rockland County HHW facility accepts primarily HHW, and only select special solid wastes (e.g., electronics waste). Specifically, the facility accepts the following materials:

- Liquids, Solids & Powders:
  - Oil & latex paints, wood preservatives & thinners, waxes & polishes, resins & adhesives, spot removers, aerosols, driveway sealer, antifreeze, motor oil, oil filters, gasoline, kerosene & lighter fluid, chemistry kits, photography chemicals, pool chemicals, pesticides, fungicides & herbicides
- Mercury Containing Items:
  - Thermometers & thermostats
- Tanks:
  - Fire extinguishers, up to 20-lb propane tanks
- Light Bulbs:
  - All sizes of compact & fluorescent
- Batteries:
  - Household, car, boat, rechargeable & button cell
- Electronics:
  - Computers, monitors, laptops, tablets, printers, scanners, fax & copy machines, inkjet and laser printer cartridges, TVs, VCRs, CD players, radios, telephones, cell phones & beepers
- Small Freon Appliances:
  - Air conditioners, small refrigerators, water coolers & dehumidifiers
- Medications:
  - Non-controlled over the counter & prescription medication & pet medications
  - Controlled substances may be brought during special Saturday/Sunday events only.

Rockland County provided the operational costs data in Table 19 below related to their HHW facility.

Table 19. Rockland County HHW Facility Annual Operating Costs

<b>Expense</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>Average</b>
Office Supplies and Printing	\$9,850	\$9,800	\$9,800	\$9,800
Postage, Freight and Advertising	\$18,325	\$18,545	\$1,745	\$13,000
Building Repair	\$410	\$17,513	\$4,980	\$7,600
Motor Vehicle Repair	\$0	\$239	\$0	\$80
Health Department	\$32,000	\$32,000	\$32,000	\$32,000
Communications	\$2,193	\$1,069	\$1,114	\$1,500
Material Dismantling and Disposal	\$779,735	\$816,854	\$736,316	\$780,000
Fixed Labor	\$357,480	\$333,948	\$337,524	\$340,000
Other Expenses	\$13,171	\$16,154	\$69,747	\$33,000
<b>Total</b>	<b>\$1,213,164</b>	<b>\$1,246,122</b>	<b>\$1,193,227</b>	<b>\$1,200,000</b>

Comparing these costs against the costs incurred by Monroe County for HHW collection (i.e., \$300,000-\$400,000 per year), and understanding that the population of Monroe County is nearly double that of Rockland County, it appears that costs for HHW collection and disposal in Rockland County are exceptionally high. As Monroe County is located adjacent to Ontario County, we believe that Monroe County HHW collection and disposal costs are more representative of the same for Ontario County.

### **5.3 CENTRALIZED HHW/SPECIAL WASTE FACILITY CONSIDERATIONS**

#### Centralized Facility

Similar to other counties in New York State, including Monroe County and Rockland County as described above, the County should consider development of a centralized HHW facility as a base of operations for collection HHW and other special wastes. By doing so, other solid waste facilities could focus their operations on standard solid and yard waste collection only, without need to provide facilities for collection of special waste. This measure would increase their operational efficiency. The centralized HHW facility would be specifically designed for the collection of these wastes not accepted by the other solid waste facilities. Since these special wastes are generated at a lower frequency and quantity (than solid and yard wastes) by constituents, distance from individual constituents to the facility is not as crucial as it is for solid and yard wastes.

The Canandaigua solid waste facility is optimally located for a centralized HHW facility. Additionally, due to recent acquisition by the Town of Canandaigua of approximately 7 acres of greenfield property adjacent to the facility, there is sufficient space for development of such a facility at this location.

However, based on the experience of Monroe County as discussed in Section 5.1 above, a key to operational success and financial efficiency of a centralized facility is the continuous presence of a solid waste contractor at the facility for acceptance of special wastes. The Canandaigua facility is operated by Canandaigua staff. The County maintains a solid waste contract with Casella for operations of the Landfill and adjacent Seneca facility. To take advantage of this key efficiency measure, we recommend that the County work with Casella to develop either the Seneca facility or the old MRF at the Landfill (i.e., whichever facility is not used by Casella for the Southeast region consolidated solid waste facility) as a centralized HHW facility.

As the population of Ontario County is significantly smaller than that of Monroe County and Rockland County, the scale of operations of a centralized HHW facility could also be reduced in comparison. Specifically, as compared to the Monroe County and Rockland County facilities, a County facility size could be smaller, and the operational hours could be reduced, resulting in lower capital and operating costs as compared to the facilities at these other locations.

HHW collection at the Monroe County ecopark (performed by under contract by Clean Harbors) is by appointment only, generally on Wednesdays from 1PM through 6:30PM and Saturdays from 7:30AM through 1PM. We would recommend that the County centralized facility be operated on Saturdays only from 7:30AM through 1PM, with HHW dropoff by appointment only. As the program is operated and need becomes evident, more hours or days could be added.

Collection of special wastes at the centralized facility could be performed on a relatively continuous basis by Casella personnel, which Monroe County indicates is the key to success for such a facility. While the concept of a centralized facility is to collect both HHW and special wastes at the same facility, in the County's case, it may make sense to centralize special waste collection at the Southeast solid waste facility, where Casella would already be operating as part of its contract with the County. In either case, however, the County would likely need to negotiate this additional special waste collection service with Casella, so some additional cost would likely result.

## Cost-Benefit Analysis

Operation of a centralized facility could displace some or all of the current County and municipal HHW and special waste collection events. Table 17 in Section 4.2 indicates that the total average cost for County-sponsored collection events is approximately \$53,000 per year for HHW collection and approximately \$56,000 per year for special wastes. Pro-rating the Monroe County centralized HHW collection and disposal cost (approximately \$350,000 per year, after grants) against the populations of Monroe County (approximately 740,000) and Ontario County (approximately 110,000), the resulting estimated County centralized HHW collection and disposal cost is approximately \$52,000 per year, which is similar to the current average County HHW collection and disposal cost of \$53,000 per year (after grants). Thus, we would not expect major operational cost changes from centralizing HHW collection versus continued operation of HHW collection events around the County.

The benefit of developing such a facility would be higher availability for HHW collection, and thus, reduced disposal of HHW in the Landfill (via the MSW stream). While HHW collection and disposal costs would likely not change significantly by transitioning HHW collection to a centralized HHW facility, there would be a significant capital cost associated with upgrading the existing facility (i.e., either the Seneca solid waste facility or old MRF at the Landfill) for operation as a HHW facility. The estimated cost of such upgrades is not included in this report, as it is highly dependent on the

specific design of the HHW facility operation. Capital costs for the Monroe County and Rockland County facilities were not available, and in any case, would likely not be representative of a similar County HHW facility.

To increase service availability while minimizing financial impact, we would recommend that all HHW and special waste events around the County be displaced through continuous special waste collection by Casella at either the Seneca facility or old MRF at the Landfill, and HHW collection by a separate contractor (e.g., Clean Harbors) on an appointment basis at the facility not used by Casella.

## Potential Other Centralized Facility Features

### Waste Tire Collection

As part of centralization of special waste collection, we recommend that the County invest in an industrial tire splitter or other processing device so tires may be recycled or, if necessary, properly disposed in the Landfill. Splitting and otherwise deconstructing tires may allow the County to dispose of this material at reduced cost by allowing the flattened tires to be landfilled, consuming less volume and resulting in fewer landfill operational impacts. The Town of Victor currently removes rims from certain tires at its facility. We believe that, given increased economies of scale, waste tire processing and transfer could be conducted more effectively and efficiently at a centralized facility.

## 5.4 CENTRALIZED FACILITY IMPACTS

In addition to the cost impacts described in Section 5.3 above, discontinuing various County- and municipally-sponsored HHW and special waste collection events in favor of operation of the centralized HHW and special waste collection facilities at the Landfill and Seneca facility would have impacts on constituent travel for dropoff of waste materials, and possibly on program participation/usage.

The centralized facilities would be located at or adjacent to the Landfill, which is in the Southeast region of the County. Currently, the County hosts many of the special waste collection events at the Landfill, including:

- HHW: 1 of 2 events/year
- E-waste: 1 of 2 events/year
- Document Shredding: 2 events/year
- Residential Waste Tires: 1 event/year (generally)

Comparing the recommended centralized facility against such events, there would be no user travel impact. However, there are other events are hosted by the municipalities at their locations, which would have varied travel impacts. However, we have no data regarding the participation in such events, and as such, cannot estimate the specific user travel impacts of transitioning such events to a centralized facility. Still, since the majority of special waste collection events are hosted at the Landfill, and the frequency of these events (and thus, projected use by each user of the centralized facility) is relatively low, we estimate that the user travel impacts resulting from centralizing HHW and special waste collection at the old MRF and Seneca facility would be low.

The key to promoting diversion of HHW and special wastes from MSW and recyclable streams, and minimize illegal dumping, is to increase availability of HHW/special waste collection. We recommend

that the centralized HHW facility be open every Saturday, which is a significant increase in availability from current semi-annual HHW collection events. We also recommend that special wastes be collected continuously (i.e., on the same schedule as MSW and recyclables collection), which is also a significant increase in availability from current County and municipal special waste collection events. Additionally, there would be decreased user confusion as to what special wastes could be dropped off and on what schedule, since the facility would operate consistently for all special wastes. We believe that the impact of longer drive distances would be much less important to users than increased availability. As such, we believe that regular operation of centralized HHW and special waste facilities in lieu of collection events may significantly increase HHW and special waste diversion from the MSW and recyclables streams, and reduce illegal dumping of these materials.

## **6.0 AVAILABILITY OF NEW YORK STATE GRANTS**

Grants may be available to fund portions of the solid waste management program. The following entities have grant programs that may be applicable:

- NYSDEC: Municipal Waste Reduction and Recycling Program (MWR&R)
- NYS Pollution Prevention Institute (NYSP2I)
- United States Department of Agriculture (USDA) Rural Solid Waste Management Grants

### **6.1 NYSDEC MUNICIPAL WASTE REDUCTION AND RECYCLING PROGRAM GRANTS**

NYSDEC provides grants for select municipal projects pertaining to capital improvement and equipment purchase. The grants are provided under the Municipal Waste Reduction and Recycling (MWRR) Program. The projects “are expected to enhance municipal capacity to collect, aggregate, sort and process recyclable materials. Recycling equipment includes structures, machinery, or devices providing for the environmentally sound recovery of recyclables including source separation equipment and recyclables recovery equipment”. Municipalities apply for grants through the NYS Grant Opportunity Portal through IntelliGrants, depending on the needs and size of the jurisdiction.

NYSDEC is authorized to provide assistance for projects that further the primary strategy of the State solid waste management hierarchy. A waste reduction/prevention project reduces the volume or toxicity of materials entering the MSW stream at the point of generation. These projects include:

- Educational efforts that prevent the generation of waste
- Materials reuse
- Promotion or use of refillable or reusable packaging
- Audits of procedures and practices, resulting in the elimination or reduction of materials disposed
- Increasing awareness of non-toxic household product substitutes
- Promotion of backyard or on-site composting
- Promotion of product stewardship initiatives.

NYSDEC is also authorized to provide State assistance for projects that enhance municipal recycling infrastructure through:

- Construction materials recycling facilities
- Construction of composting facilities
- Purchasing of recyclables processing equipment
- Purchasing of recycling containers, and
- Purchasing of new recyclables collection vehicles

Proposals for projects are accepted on an ongoing first-come-first-served basis. All applications must be submitted using the NYS Grants Gateway.

NYSDEC is also authorized to provide State assistance for Recycling Coordinator salaries and for public education programs conducted by municipalities. This funding helps expand local recycling programs and increase participation.

Eligible projects for state assistance under this program include planning, educational and promotional activities to increase public awareness of and participation in waste reduction and recycling. Municipalities may request funding toward costs for recycling coordination, publications, education and outreach for recycling and waste reduction.

Recycling Education, promotion or outreach includes:

- Recycling guides, mailers, brochures, and webpages
- Advertising on TV, radio, newspaper, internet, billboards, etc.
- Recycling signs and displays
- Give-away items, children's shows, county fair displays, America Recycles Day items

Recycling Coordination involves the following activities:

- Planning, monitoring and modifying the local recycling program
- Developing public education and promotion tools
- Implementing recycling outreach strategies
- Establishing, monitoring and improving recyclables marketing, tracking and reporting
- Fostering inter-governmental recycling coordination
- Developing enforcement strategies
- Managing finances of the municipal recycling program

Eligible costs for personal services are limited to the salary and verifiable fringe benefit costs of a Recycling Coordinator, who must be an employee of the applicant and assigned to the project for no less than 50 percent of their full-time work schedule.

## **6.2 NYSP2I GRANTS**

### **Food Waste Reduction and Diversion Reimbursement Program**

Aimed at expanding the State's capacity to reduce and divert wasted food, NYSP2I's Food Waste Reduction and Diversion Reimbursement program is part of a larger effort to reduce New York's GHG emissions by 40 percent by 2030. The funding is provided by the State's Environmental Protection Fund (EPF) and is administered by Empire State Development (ESD). ESD has contracted with P2I to operate the funding program, which is partnered with RIT to form the Food Waste Reduction and Diversion Reimbursement Program. Eligible projects must:

- Divert food waste from landfill or incineration through the use of equipment or technologies; and,
- Be led by New York State businesses, municipalities, or not-for-profits producing greater than one ton of food waste per week.

Reimbursement would cover:

- The purchase and installation of eligible equipment and technologies
- Up to 44 percent of eligible project costs, for a maximum award of \$100,000, upon proof of waste reduction goal achievement.

## Community Grants Program

Each year, NYSP2I awards funding under its Community Grants to projects that seek to improve the health, environmental quality, and economic vitality of communities across New York State. The program is designed to support initiatives that raise public awareness and understanding of environmental issues and that lead to adoption of sustainable practices. NYSP2I seeks projects that:

- utilize partnerships and collaborations with other organizations;
- demonstrate a broad community impact;
- address populations and communities affected by, experiencing or susceptible to environmental harms and risk;
- can easily be replicated and used by other organizations;
- demonstrate an ability to source funding from additional sources; and,
- are located in Environmental Justice (EJ) communities.

Applications for Community Grants are considered on an annual basis, and are generally due at the end of May each year. NYS2PI requires that the grant application demonstrate that the project will:

- Increase awareness, understanding and/or lead to implementation of pollution prevention practices and/or behaviors at the community or municipal level;
- Demonstrate a clear and actionable project plan;
- Have measurable program outcomes;
- Result in one or more concrete deliverable(s) (past examples include training or public education workshops; demonstration projects; implementation of a new policy, technology, or practice; and, creation and dissemination of brochures, videos or a website);
- Are completed in accordance with NYS2PI budget guidelines; and,
- Are completed within a one-year project timeline (generally beginning in October of the grant year, and ending in September of the following year).

Community Grants are a funding opportunity for community organizations and local government agencies based and operating in New York State. The maximum value of each grant is \$20,000.

In speaking with NYSP2I, the County may be eligible for a Community Grant for education and outreach related to food waste diversion and/or composting efforts for the purpose of pollution

prevention. A Community Grant may also fund some small equipment purchases (e.g., food waste bins). However, most solid waste projects are not eligible for Community Grants, and Community Grants are not intended to fund major capital projects. Three case studies of recently-awarded food waste-related Community Grants are included in Appendix G.

### **6.3 USDA RURAL SOLID WASTE MANAGEMENT GRANTS**

USDA offers yearly grant funding to state and local governmental entities and other public bodies, Native American tribes, nonprofits, and academic institutions for rural development projects. Under the US Code of Federal Regulations (7 CFR 1775 Subpart D), these funds are to be allocated for the purpose of water pollution reduction and improvement of solid waste management and planning in eligible areas. It is a well-funded resource that gives special consideration to governmental entities serving areas with less than 10,000 residents, with special consideration given to low-income populations. Since most of the municipal entities in the County consist of less than 10,000 people, these municipalities may be eligible for a solid waste management grant from USDA.

## 7.0 RECOMMENDATIONS

### Municipal Facility Consolidation

As discussed in Section 3.0 of this report, we recommend that the County work with municipalities to consider consolidating solid and yard waste operations into the following facilities:

- Southwest: South Bristol
- Northwest: Victor (for solid waste) and Farmington (for yard waste)
- Central Hub: Canandaigua
- Northeast: Manchester (for solid waste) and Phelps (for yard waste)
- Southeast: Either County Landfill/Seneca or Gorham

There will be significant capital costs associated with upgrading these facilities to handle increased traffic and/or provide consistent services. However, these facility consolidations will improve waste collection service quality while minimizing impacts to costs and constituent convenience.

### Centralized Special Waste Collection Facilities

As discussed in Section 5.0, centralized facilities could be developed for special waste and HHW streams. We recommend that special wastes be collected at the facility selected by Casella for solid waste collection and transfer (i.e., either the Seneca facility or the old MRF at the Landfill), and HHW be collected at the other facility. In this way, special wastes could be collected whenever the solid waste facility is being operated by Casella, as is currently done at the Monroe County ecopark by their solid waste contractors. We recommend that HHW collection be performed one day per week (e.g., Saturday), from 7:30AM to 1PM, on an appointment basis. In this way, current regularly-scheduled events held around the County could be discontinued in favor of operation of these centralized special waste and HHW facilities.

The most significant benefit of special waste collection at the facility operated by Casella is that it may minimize or eliminate operating cost impacts, due to their ongoing operations at that facility. Development of the HHW facility will likely come at significant cost, but this facility will provide a consistent source for disposal of HHW, thus minimizing the amount of HHW improperly disposed in the MSW or recyclable streams, or illegally dumped.

### New York State Grants

We recommend that the County pursue a NYSDEC Municipal Waste Reduction and Recycling Program Grant for the solid waste facility consolidations and the HHW facility development, as well as hiring a Recycling Coordinator for the County. If the County decided to pursue food waste composting at the yard waste facilities, it could also apply for Food Waste Reduction and Diversion Reimbursement grants and/or Community Grants from NYS2PI.

Appendix A  
Facilities by Major Service Line

Appendix B  
Policies and Practices by Material

Appendix C  
Facility Inventory Narrative Descriptions

## Appendix D

### Data Tables and Exhibit Source Info

## Appendix E

### Summaries of Facilities not Selected for Hub-and-Spoke System

## Appendix F

### Facility Consolidation Capital Cost Estimates

## Appendix G

### NYSP2I Food Waste-Related Community Grant Case Studies